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ABSTRACT

This government publication presents statistics and discussion on teenage marriages, divorces, parenthood, and mortality. In sheer numbers teenagers account for a large share of the marriages and births, especially illegitimate births. In 1969, about one-third of all brides and 14 percent of grooms were teenagers; in 1968 17 percent of all births and nearly 50 percent of the illegitimate births were to teenage mothers. On the other hand, the proportion of divorces granted to teenagers is small. More significant is the large proportion of divorces granted to persons who married in their teens (46 percent for women and 19 percent for men). The total number of deaths among teenagers also is small, and the death rate from all causes combined is low. Motor vehicle accidents, however, take a heavy toll from the teenage group; in 1969 the age group 15-19 years ranked a close second to the age group 20-24 years in more deaths from this cause than any of the other five-year age groups throughout the entire life span. These and other facts presented in this report on teenagers were derived from the vital statistics of the U. S. Bureau of the Census. Figures for marriages and divorces were obtained or estimated from data provided by states. Discussions of estimating procedures and of reliability of the estimate appear in the appendix to this report. (Author/PC)

# Teenagers: Marriages, Divorces, Parenthood, and Mortality

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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Public Health Service
Health Resources Administration

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Data from the
NATIONAL VITAL STATISTICS SYSTEM

Series 21
Number 23

# Teenagers: Marriages, Divorces, Parenthood, and Mortality

Analysis of teenage marriage, divorce, parenthood (including information on illegitimacy rates and ratios), and mortality during the 1960's.

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National Center for Health Statistics
Rockville, Md. August 1974

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# TEENAGERS: MARRIAGES, DIVORCES, PARENTHOOD, AND MORTALITY

Alice M. Hetzel and Marlene Cappetta, *Division of Vital Statistics*

## INTRODUCTION

There are more teenagers in the United States today than ever before in the history of the country.

In 1969 there were an estimated 18.6 million persons 15 through 19 years of age, the group accounting for most of the teenage marriages, divorces, parenthood, and mortality. This was 5.6 million more than in 1959 and nearly 8 million more than in 1949. The number of teenagers will continue to increase during the 1970's but at a slower pace. After a slight interruption during the 1980's, the upward trend is expected to continue. According to current projections the teenage population is likely to be in the neighborhood of 25 million by the year 2000 (figure 1).

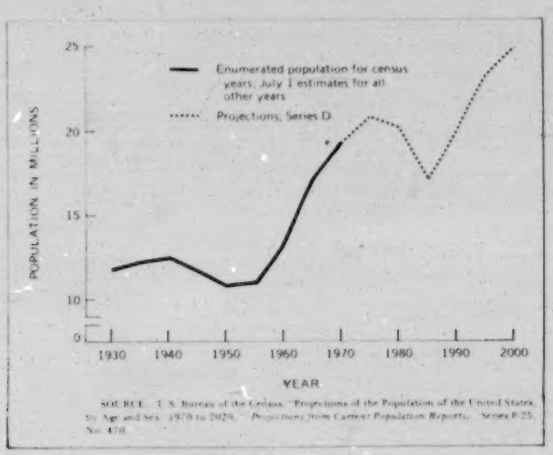


Figure 1. Teenage population 15-19 years of age: United States, 1930-2000.

The tremendous growth in the population aged 15-19 is even more impressive when viewed against the fact that for more than 25 years (from 1930 to 1958) this segment of the population stayed within the bounds of 10 and 12.5 million. Then in just 11 years it increased almost 50 percent.

The proportion of the total population accounted for by teenagers has also changed under the influence of varying size cohorts moving through the age groups. During the 1930's the proportion of teenagers was relatively stable, staying at 9.4 or 9.5 percent, but during the 1940's and early fifties it declined steadily. By 1952 teenagers aged 15-19 years accounted for only 6.7 percent of the total population. This proportion remained constant until 1957, when a decided upward progression began. During the 1960's babies born to parents married during the post-World War II marriage boom increased the ranks of the teenage population. By 1969 the 15-19 group accounted for 9.1 percent of the population.

In sheer numbers teenagers account for a large share of the marriages and births, especially of illegitimate births. In 1969 about one-third of all brides and 14 percent of grooms were teenagers; in 1968 17 percent of all births and nearly 50 percent of the illegitimate births were to teenage mothers.

On the other hand, the proportion of divorces granted to teenagers is small—about 4 percent of all divorces for women and 1 percent for men in 1969. More significant is the large proportion of divorces granted to persons who married in

their teens (46 percent for women and 19 percent for men).

The total number of deaths among teenagers also is small and the death rate from all causes combined is low. Motor vehicle accidents, however, take a heavy toll from the teenage group; in 1969 the age group 15-19 years ranked a close second to the group aged 20-24 years in having more deaths from this cause than any of the other 5-year age groups throughout the entire life span. The death rate for teenagers was among the highest of the age-specific fatality rates for motor vehicle accidents.

These and other facts presented in this report on teenagers were derived from the vital statistics of the United States and publications of the U.S. Bureau of the Census. Figures for marriages and divorces were obtained or estimated from data provided by States having the necessary information on their marriage and divorce records. Discussions of estimating procedures and of reliability of the estimates appear in the appendix to this report.

## MARRIAGES

### The Married Teenage Population

Early marriage is more common now than it was at the turn of the century but slightly less common than it was 20 years ago. A gradual upward trend from 1890 to 1930 and a decline in the 1930's preceded an upsurge in the married teenage population right after World War II.

The increase from 1940 to 1950 was greater than any that had taken place in the previous half century. According to the census enumerations, in 1950, 31 percent of all women 18-19 years of age had already married in contrast to 22 percent in 1940. For men at the same ages the increase was from 3.7 to 6.6 percent. Similar increases were observed at ages 15-17, but even in 1950 only about 7 percent of the females and 1 percent of the males in this group had married.

From 1950 to 1960 the proportion married declined slightly in the female population 15-17 years old, but for females aged 18-19 and for both subgroups of males the proportion married continued to increase (table A). In 1970 there was a substantial decline from 1960 in the proportion married for females in both age groups and a slight decline for males 18-19 years of age. The proportion married among teenagers, however, was still much lower for males than for females.

### Teenage Marriages During the 1960's

An increase in the number of teenagers 15-19 years of age during the period 1960-69 accounted

Table A. Percent of teenage population ever married, by sex and age: United States, 1890-1970

| Year | Female | | | Male | | |
|---|---|---|---|---|---|---|
| | 15-19 years | 15-17 years | 18-19 years | 15-19 years | 15-17 years | 18-19 years |
| 1970 | 11.9 | 4.7 | 23.4 | 4.1 | 1.4 | 8.7 |
| 1960 | 16.1 | 6.8 | 32.1 | 3.9 | 1.2 | 8.9 |
| 1950 | 17.1 | 7.2 | 31.1 | 3.3 | 1.1 | 6.6 |
| 1940 | 11.9 | 4.6 | 22.2 | 1.7 | 0.4 | 3.7 |
| 1930 | 13.1 | 5.4 | 24.6 | 1.8 | 0.3 | 4.1 |
| 1920 | 12.9 | 5.2 | 24.6 | 2.1 | 0.5 | 4.7 |
| 1910 | 11.7 | --- | --- | 1.2 | --- | --- |
| 1900 | 11.2 | --- | --- | 1.0 | --- | --- |
| 1890 | 9.7 | --- | --- | 0.5 | --- | --- |

SOURCES: U.S. Bureau of the Census, U.S. Census of Population: 1960, Detailed Characteristics, United States Summary, Final Report PC(1)-1D, tables 177 and 179, 1963, and U.S. Census of Population: 1970, Marital Status, Subject Report PC(2)-4C, table 1, 1973. Washington, U.S. Government Printing Office.

for 50 percent of the growth in the total unmarried population 15 years of age and over. This rapid growth of the teenage population had a marked effect on the number of marriages performed.

About one-third of the women and 14 percent of the men who married during 1969 were teenagers. An estimated 717,000 women and 311,000 men married at ages under 20 years (table 1). This was more than for any of the previous 4 years and an increase over 1960 of 160,000 women and 110,000 men (table B). The number of teenage marriages was up nearly 30 percent for women and over 50 percent for men in 1969 as compared with 1960.

Annual increases in the number of marriages were greatest in the middle and late sixties, when the unusually large birth cohorts of the immediate post-World War II years were reaching marriageable ages. Even with this tremendous increase in the number of teenage marriages, between 1960 and 1969 the teenage marriage *rate* actually declined for women and increased only slightly for men (table B). In other words, the increase in the number of teenage marriages did not keep pace with the increase in the teenage population for women and did not exceed it greatly for men.

If no significant changes occur in the teenage marriage rate, the number of teenage marriages will continue to increase at a diminishing rate until the late seventies. By then the downward trend in births that began in 1958 and continued through the sixties will have ended this postwar wave of teenage eligibles.

Table B. Estimated number and rate of marriages for teenagers aged 15-19 years, by sex: United States, 1960 and 1965-69

[See appendix for method of computation. Rates per 1,000 unmarried population 15-19 years of age]

| Year | Number | | Rate | |
|---|---|---|---|---|
| | Female | Male | Female | Male |
| 1969--- | 717,000 | 311,000 | 87.7 | 34.6 |
| 1968--- | 689,000 | 294,000 | 86.2 | 33.3 |
| 1967--- | 663,000 | 285,000 | 85.7 | 33.0 |
| 1966--- | 689,000 | 299,000 | 89.0 | 34.5 |
| 1965--- | 661,000 | 252,000 | 89.8 | 30.4 |
| 1960--- | 557,000 | 201,000 | 100.3 | 31.2 |

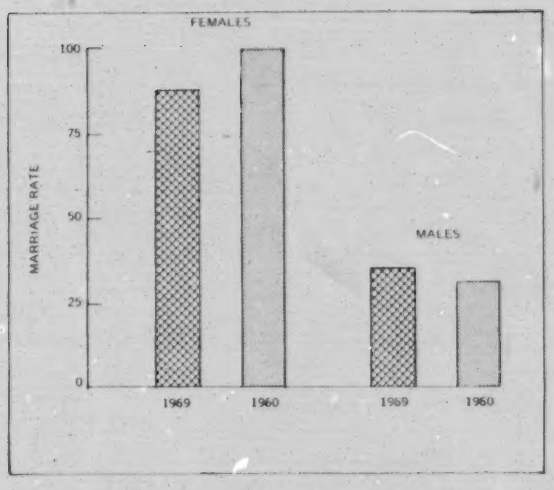


Figure 2. Estimated marriage rates per 1,000 unmarried teenagers aged 15-19 years, by sex: United States, 1960 and 1969.

In 1969 the teenage marriage rate, computed by relating the estimated number of marriages at ages under 20 years to the unmarried population 15-19 years of age, was 88 per 1,000 for women and 35 per 1,000 for men. This was 12 percent below the rate of 100 per 1,000 observed for women in 1960 and 13 percent above the rate of 31 per 1,000 for men (figure 2).

The opposite trend in teenage marriage rates for brides and for grooms may be part of the phenomenon referred to in recent literature as the "marriage squeeze."[1,2] A shortage of suitable partners was predicted for the large number of girls from the post-World War II birth cohorts who, because women in the United States customarily marry at younger ages than men, reached a marriageable age sooner than boys from the same cohorts.

Even with the large number of teenage marriages during the 1960's, the teenage marriage

[1]Glick, P. C., Heer, D. M., and Beresford, J. C.: Family formation and family composition, trends and prospects, in Marvin B. Sussman, ed., *Sourcebook in Marriage and the Family*. New York. Houghton Mifflin Co., 1963. p. 38.

[2]Akers, Donald S.: On measuring the marriage squeeze. *Demography* 4(2):907-924, 1967.

Table C. Estimated number and rate of marriages, by age and sex: United States, 1969

[See appendix for method of computation. Rates per 1,000 unmarried population in specified group]

| Age | Female | | Male | |
|---|---|---|---|---|
| | Number | Rate | Number | Rate |
| Total | 2,145,000 | 80.0 | 2,145,000 | 98.7 |
| 15-19 years | 717,000 | 87.7 | 311,000 | 34.6 |
| 20-24 years | 843,000 | 273.5 | 985,000 | 221.1 |
| 25-34 years | 311,000 | 189.7 | 491,000 | 234.1 |
| 35-44 years | 129,000 | 86.0 | 163,000 | 123.5 |
| 45-54 years | 84,000 | 38.4 | 101,000 | 73.2 |
| 55-64 years | 43,000 | 14.2 | 56,000 | 48.7 |
| 65 years and over | 19,000 | 2.7 | 39,000 | 16.4 |

rate in 1969 was far below the rate for the next age group, 20-24. In fact, for males it was the lowest marriage rate of any age group under 65, and for females it was the lowest under age 35. The estimated number of marriages and marriage rates by age for women and men in the United States during 1969 appear in table C.

## Marriages in the MRA

Sample data from the marriage-registration area (MRA) are the closest approximation to national data on detailed characteristics now available. In general, marriage rates in the MRA are considered reasonable estimates for the Nation. It has been observed, however, that the teenage marriage rates in the MRA have been below those for the entire United States, indicating that States outside the MRA had high early marriage rates. In 1969 the marriage rate for the MRA was 78.9 per 1,000 unmarried females aged 15-19 and 30.8 per 1,000 unmarried males 15-19, as compared with estimated rates of 87.7 and 34.6 for the United States as a whole.

In spite of this deficiency, MRA data provide marriage information not otherwise available. Although the *number* of marriages performed in the MRA are not comparable from year to year because of the growth of the registration area, the marriage *rates* over these years are much less affected and are useful indicators of trends. Both numbers and rates provide reliable information on various relationships for a given year.

*Number of marriages.*—To give some information on annual changes in the number of teenage marriages during the 1960's, data from the 34 States (and the District of Columbia) that have been in the MRA since 1961 are shown in table D. By holding the States constant, year-to-year inconsistencies arising from States entering the MRA are eliminated. This provides comparable figures on numbers of teenage marriages for the years 1961-69, including a breakdown showing the early and late teens separately.

There were far more teenage marriages at ages 18 and 19 than at ages under 18. In each of the years 1961-69, from 65 to 71 percent of the teenage brides and 89 to 91 percent of the teenage grooms were 18 or over.

The year of greatest increase in teenage marriages was different for the group under 18 years than for the group aged 18 and over, varying for the most part with the number of persons entering the particular age group. For ages under 18, mostly 16- and 17-year-olds, the largest annual increase in marriages occurred in 1964; for ages 18 and 19 the greatest increase was in 1965. These increases tied in with the large increases that had occurred in the 1946, '47, and '48 birth cohorts then reaching those ages.

Table D. Number of teenage brides and grooms at specified ages and percent change from preceding year: uniform group of 34 marriage-registration States and the District of Columbia, 1961-69

[Based on sample data]

| Year | Bride | | | Groom | | |
|---|---|---|---|---|---|---|
| | Under 20 years | Under 18 years | 18-19 years | Under 20 years | Under 18 years | 18-19 years |
| | Number | | | | | |
| 1969 | 422,281 | 129,844 | 292,437 | 181,893 | 18,448 | 163,445 |
| 1968 | 410,574 | 123,794 | 286,780 | 176,274 | 17,422 | 158,852 |
| 1967 | 392,545 | 116,677 | 275,868 | 167,995 | 15,903 | 152,092 |
| 1966 | 409,565 | 119,771 | 289,794 | 178,407 | 15,888 | 162,519 |
| 1965 | 394,401 | 124,109 | 270,292 | 154,353 | 14,549 | 139,804 |
| 1964 | 366,681 | 128,986 | 237,695 | 129,164 | 13,870 | 115,294 |
| 1963 | 349,121 | 114,874 | 234,247 | 125,540 | 12,345 | 113,195 |
| 1962 | 349,456 | [1]102,952 | [1]246,504 | 127,804 | [1]11,701 | [1]116,103 |
| 1961 | 344,349 | [1]104,329 | [1]240,020 | 120,585 | [1]11,925 | [1]108,660 |
| | Percent change from previous year | | | | | |
| 1969 | +2.9 | +4.9 | +2.0 | +3.2 | +5.9 | +2.9 |
| 1968 | +4.6 | +6.1 | +4.0 | +4.9 | +9.6 | +4.4 |
| 1967 | -4.2 | -2.6 | -4.8 | -5.8 | +0.1 | -6.4 |
| 1966 | +3.8 | -3.5 | +7.2 | +15.6 | +9.2 | +16.2 |
| 1965 | +7.6 | -3.8 | +13.7 | +19.5 | +4.9 | +21.3 |
| 1964 | +5.0 | +12.3 | +1.5 | +2.9 | +12.4 | +1.9 |
| 1963 | -0.1 | +11.6 | -5.0 | -1.8 | +5.5 | -2.5 |
| 1962 | +1.5 | -1.3 | +2.7 | +6.0 | -1.9 | +6.8 |

[1]Data are estimated. See appendix for estimating procedure.

*Marriage rates.*—Teenage marriage rates, available in greater detail for the marriage-registration States than for any other areas, are shown in tables E and F for age subgroups and single years of age.

As was shown by the U.S. estimates, women in the age group 15-19 married at a slightly lower rate in 1969 than in 1965, while the opposite was true for men in the same age group. The highest teenage marriage rates during the middle and late sixties were in 1965 for women and in 1966 and 1969 for men. From 1964 through 1969 the marriage rate for teenage women was much lower than in 1960, but this was not true for men. (Comparable rates for 1961-63 are not available.) The same general pattern is apparent in the rates for the 15-17 and 18-19 age subgroups.

Between 1964 and 1969, except at the very young ages (14 and 15 years) teenage marriage rates by single years of age show a generally downward trend for females (table F). The reduction was greatest at age 18, where the rate for 1969 was 16 percent below the rate for 1964. An upward trend was observed for males, with the greatest percentage increases in the very early ages (16 and 17 years).

*Selected characteristics.*—Most marriages involving teenagers are first marriages; 98 percent of teenage brides and 99 percent of teenage grooms in the MRA during 1969 were marrying for the first time. This was in sharp contrast to the proportion of first marriages among those marrying at ages 20 and over (67 percent for brides and 73 percent for grooms) and was somewhat greater than for those marrying at ages 20-24 (90 percent for brides and 95 percent for grooms).

From 1960 to 1969 the age gap narrowed between teenage brides and grooms and their mar-

Table E. Teenage marriage rates at specified ages, by sex: marriage-registration area, 1960 and 1963-69

[Based on sample data. Rates per 1,000 unmarried population in specified group]

| Year | Female | | | Male | | |
|---|---|---|---|---|---|---|
| | 15-19 years | 15-17 years | 18-19 years | 15-19 years | 15-17 years | 18-19 years |
| 1969 | 78.9 | 35.5 | 165.5 | 30.8 | 5.0 | 77.0 |
| 1968 | 78.7 | 35.0 | 164.7 | 30.3 | 4.7 | 75.4 |
| 1967 | 76.3 | 33.5 | 157.3 | 29.1 | 4.1 | 72.1 |
| 1966 | 79.8 | 34.6 | 163.0 | 30.8 | 4.2 | 73.8 |
| 1965 | 81.0 | 36.6 | 171.5 | 27.7 | 4.1 | 70.0 |
| 1964 | 78.9 | 37.7 | 181.9 | 24.6 | 3.8 | 69.4 |
| 1963 | --- | --- | 181.0 | --- | --- | 68.4 |
| 1960 | 95.1 | 45.3 | 213.1 | 28.6 | 4.7 | 76.6 |

Table F. Teenage marriage rates by single years of age and sex: marriage-registration area, 1964-69

[Based on sample data. Rates per 1,000 unmarried population in specified group]

| Age | 1969 | 1968 | 1967 | 1966 | 1965 | 1964 |
|---|---|---|---|---|---|---|
| Female | | | | | | |
| 14 years[1] | 1.6 | 1.4 | 1.3 | 1.4 | 1.5 | 1.6 |
| 15 years | 7.9 | 7.2 | 6.3 | 6.7 | 7.0 | 7.3 |
| 16 years | 35.8 | 35.0 | 33.9 | 36.1 | 36.9 | 38.4 |
| 17 years | 64.1 | 61.9 | 62.0 | 61.8 | 66.1 | 65.8 |
| 18 years | 146.8 | 140.6 | 140.4 | 153.3 | 154.8 | 174.3 |
| 19 years | 188.4 | 179.8 | 176.9 | 173.3 | 199.1 | 190.9 |
| Male | | | | | | |
| 16 years[1] | 2.4 | 2.3 | 1.8 | 1.8 | 1.8 | 1.9 |
| 17 years | 13.2 | 12.4 | 10.9 | 10.9 | 10.5 | 9.3 |
| 18 years | 57.8 | 54.7 | 53.6 | 55.5 | 49.5 | 51.1 |
| 19 years | 98.8 | 97.9 | 92.5 | 93.1 | 100.5 | 89.2 |

[1]Includes any marriage under this age.

riage partners, as shown by the median age of spouse for teenage brides and grooms at first marriage of both partners (table G). For brides 18 years of age, the median age of groom decreased over half a year, from 21.3 in 1960 to 20.6 in 1969, and for grooms 18 years old, the median age of brides increased, from 17.9 to 18.1.

In 1969 a typical teenage bride was 18 to 19 years of age, she married a groom close to 2½ years older, both were residents of the State in which the marriage occurred, and the marriage was performed in a religious ceremony in a summer month.

More specifically, about 70 percent of the teenage brides were 18 or 19 years old. Where

Table G. Median age of spouse, by specified age of teenage bride or groom at first marriage of both: marriage-registration area, 1960-69

[Based on sample data]

| Year | Specified age of bride | | | Specified age of groom | | |
|---|---|---|---|---|---|---|
| | Under 18 years | 18 years | 19 years | Under 18 years | 18 years | 19 years |
| | Median age of spouse | | | | | |
| 1969 | 19.7 | 20.6 | 21.3 | 17.3 | 18.1 | 18.7 |
| 1968 | 19.7 | 20.6 | 21.3 | 17.3 | 18.2 | 18.7 |
| 1967 | 19.8 | 20.5 | 21.3 | 17.5 | 18.2 | 18.7 |
| 1966 | 19.7 | 20.5 | 21.4 | 17.3 | 18.2 | 18.7 |
| 1965 | 20.0 | 20.7 | 21.4 | 17.7 | 18.1 | 18.6 |
| 1964 | 20.1 | 21.0 | 21.5 | 17.2 | 17.8 | 18.5 |
| 1963 | 20.0 | 21.0 | 21.5 | 17.2 | 17.9 | 18.5 |
| 1962 | 20.0 | 21.0 | 21.5 | --- | --- | 18.6 |
| 1961 | 20.2 | 21.1 | 21.6 | --- | --- | 18.6 |
| 1960 | 20.2 | 21.3 | 21.8 | 17.2 | 17.9 | 18.4 |

both partners were marrying for the first time, the median age of grooms was 20.6 years for those marrying 18-year-old brides and 21.3 for those marrying brides aged 19. For those marrying for the first time, approximately 89 percent of the teenage brides and 87 percent of the grooms were residents of the State where married; 78 percent of the brides and 76 percent of the grooms were married in religious ceremonies; and approximately one-third were married in June, July, or August (table H). Close to 90 percent of the teenage brides and grooms were white.

Except for the difference in age of partners, which narrowed in the twenties and widened at older ages, most of these characteristics were similar to those for brides and grooms who married at later ages. Teenage brides and grooms married in a civil ceremony more often than first-married brides and grooms aged 20-24, and they married a little more randomly throughout the year. Teenage brides were also a little more frequently nonresidents of the State where married than brides aged 20-24, while teenage grooms, except for the very young, were less frequently nonresidents than older grooms (table H).

*Sex and color differentials.*—Available data show a number of interesting differences in teenage marriages by sex and color.

The marriage rate is higher for females than for males throughout the teens, but the difference is much greater in the early teens than later. MRA data for 1969 showed a marriage rate for females aged 15-17 that was 7 times the rate for males in the same age group, while at ages 18-19 the rate for females was only a little over twice the rate for males (table E). These ratios are lower than those observed earlier in the decade. In 1964 the marriage rate for females 15-17 was about 10 times the rate for males at those ages, and at 18-19 years of age it was slightly over 2½ times the rate for males. This change in ratio resulted from the decline in marriage rates for female teenagers and the increase in rates for males.

Another difference between the sexes, though slight, was in residency. In first marriages, young men were somewhat more inclined to marry out of their State of residence than women, especially at the very young ages.

Type of ceremony also varied somewhat by sex. Relatively fewer of the teenage grooms than brides were married in a religious ceremony, especially at the early ages (table H).

Only minor differences in seasonality were noted. Slightly more of the teenage men than women married during the winter months and

Table H. Percent distributions of first-married brides and grooms at specified ages by selected characteristics: marriage-registration area, 1969

[Based on sample data. Computed on totals excluding figures for not stated]

| Characteristic | All ages | Under 20 years | | | 20 years and over | | | |
|---|---|---|---|---|---|---|---|---|
| | | Total | 15-17 years | 18-19 years | Total | 20-24 years | 25-29 years | 30 years or more |
| All marriages | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| **Bride** | | | | | | | | |
| Color | | | | | | | | |
| White | 87.7 | 88.5 | 86.7 | 89.4 | 87.1 | 89.3 | 81.4 | 71.4 |
| All other | 12.3 | 11.5 | 13.3 | 10.6 | 12.9 | 10.7 | 18.6 | 28.6 |
| Resident status | | | | | | | | |
| Resident | 90.1 | 89.2 | 88.5 | 89.5 | 90.7 | 91.5 | 88.5 | 86.0 |
| Nonresident | 9.9 | 10.8 | 11.5 | 10.5 | 9.3 | 8.5 | 11.5 | 14.0 |
| Type of ceremony[1] | | | | | | | | |
| Civil | 19.4 | 22.0 | 27.7 | 19.6 | 17.1 | 14.3 | 22.8 | 32.5 |
| Religious | 80.6 | 78.0 | 72.3 | 80.4 | 82.9 | 85.7 | 77.2 | 67.5 |
| Month of marriage | | | | | | | | |
| January | 5.5 | 6.0 | 6.6 | 5.8 | 5.1 | 4.9 | 5.4 | 6.1 |
| February | 6.1 | 6.8 | 6.9 | 6.7 | 5.6 | 5.5 | 6.1 | 6.5 |
| March | 6.3 | 6.9 | 7.5 | 6.6 | 5.9 | 5.8 | 5.8 | 7.8 |
| April | 6.7 | 6.8 | 6.7 | 6.8 | 6.7 | 6.6 | 7.1 | 6.4 |
| May | 8.3 | 7.6 | 7.7 | 7.5 | 8.9 | 8.8 | 9.1 | 9.4 |
| June | 13.7 | 12.8 | 12.7 | 12.8 | 14.3 | 14.9 | 13.2 | 9.9 |
| July | 8.3 | 8.8 | 8.3 | 8.8 | 8.0 | 7.9 | 8.2 | 8.5 |
| August | 12.9 | 11.7 | 10.9 | 12.0 | 13.7 | 14.2 | 12.0 | 11.1 |
| September | 8.7 | 8.5 | 8.0 | 8.7 | 8.8 | 9.0 | 7.8 | 8.0 |
| October | 7.4 | 7.7 | 7.7 | 7.7 | 7.2 | 6.9 | 8.0 | 8.9 |
| November | 8.0 | 8.3 | 8.4 | 8.3 | 7.7 | 7.5 | 8.5 | 8.9 |
| December | 8.2 | 8.2 | 8.3 | 8.2 | 8.1 | 8.0 | 8.9 | 8.5 |
| **Groom** | | | | | | | | |
| Color | | | | | | | | |
| White | 87.9 | 88.5 | 90.2 | 88.2 | 87.8 | 89.4 | 86.6 | 77.8 |
| All other | 12.1 | 11.5 | 9.8 | 11.8 | 12.2 | 10.6 | 13.4 | 22.2 |
| Resident status | | | | | | | | |
| Resident | 84.4 | 87.1 | 79.7 | 87.9 | 83.8 | 84.2 | 82.9 | 82.2 |
| Nonresident | 15.6 | 12.9 | 20.3 | 12.1 | 16.2 | 15.8 | 17.1 | 17.8 |
| Type of ceremony[1] | | | | | | | | |
| Civil | 20.0 | 24.5 | 36.7 | 23.2 | 19.1 | 17.0 | 18.3 | 31.6 |
| Religious | 80.0 | 75.5 | 63.3 | 76.8 | 80.9 | 83.0 | 81.7 | 68.4 |
| Month of marriage | | | | | | | | |
| January | 5.5 | 6.3 | 7.8 | 6.1 | 5.3 | 5.3 | 5.1 | 5.6 |
| February | 6.2 | 7.2 | 6.6 | 7.3 | 6.0 | 5.8 | 6.3 | 6.6 |
| March | 6.3 | 7.2 | 7.2 | 7.3 | 6.2 | 6.0 | 5.9 | 7.4 |
| April | 6.7 | 6.7 | 6.3 | 6.8 | 6.7 | 6.5 | 7.1 | 7.3 |
| May | 8.4 | 7.7 | 7.3 | 7.7 | 8.5 | 8.3 | 8.9 | 9.5 |
| June | 13.6 | 12.2 | 11.3 | 12.3 | 14.0 | 14.5 | 13.5 | 11.1 |
| July | 8.3 | 8.5 | 8.5 | 8.5 | 8.3 | 8.2 | 8.2 | 8.6 |
| August | 12.9 | 11.5 | 10.3 | 11.6 | 13.2 | 13.7 | 12.2 | 11.6 |
| September | 8.6 | 8.4 | 8.5 | 8.4 | 8.6 | 8.7 | 8.6 | 7.6 |
| October | 7.3 | 7.6 | 8.8 | 7.4 | 7.3 | 7.1 | 7.7 | 7.9 |
| November | 8.0 | 8.4 | 9.5 | 8.3 | 7.9 | 7.7 | 8.2 | 8.6 |
| December | 8.2 | 8.4 | 7.8 | 8.4 | 8.1 | 8.0 | 8.4 | 8.3 |

[1] 1965 data.

Table J. Teenage marriage rates for females and males, by color and age: marriage-registration area, 1960

| Sex and color | Age in years | | |
|---|---|---|---|
| | 15-19 | 15-17 | 18-19 |
| Female | | | |
| White | 97.8 | 44.0 | 227.2 |
| All other | 83.7 | 56.2 | 146.7 |
| Male | | | |
| White | 29.0 | 4.7 | 77.7 |
| All other | 26.8 | 6.3 | 67.4 |

fewer married during the summer. For both brides and grooms the June and August seasonal peaks were a little less decided for those marrying at ages under 18 than for those 18 and over.

Teenage marriage rates by race or color for the MRA in intercensal years are not computed because population bases are not available. The most recent rates are those computed for all marriages, including remarriages, in the MRA in 1960 and shown in table J.

At ages 18-19 marriage rates, especially those for females, were higher for white persons than for persons of all other races, but the former had lower rates at ages under 18.

Although total marriage rates are not available for 1969, a similar relationship by age and color is indicated by the age distributions of first marriages during that year. Teenagers accounted for slightly more of the white brides and grooms than of all other brides and grooms, but there was a difference between younger and older teenage brides. At ages 18-19 there were relatively more white brides than all other brides, but the reverse was true at the very early ages. Percentage distributions for first marriages in the MRA during 1969 are as shown in table K.

Table K. Percent distribution of first marriages for brides and grooms by age, according to color: marriage-registration area, 1969

[Based on sample data]

| Age | Bride | | Groom | |
|---|---|---|---|---|
| | White | All other | White | All other |
| All ages | 100.0 | 100.0 | 100.0 | 100.0 |
| Under 20 years | 44.5 | 41.3 | 19.5 | 18.5 |
| Under 18 years | 14.0 | 15.4 | 2.3 | 1.8 |
| 18-19 years | 30.5 | 25.9 | 17.2 | 16.7 |
| 20 years and over | 55.5 | 58.7 | 80.5 | 81.5 |

## Geographic Variation in U.S. Marriages

During the sixties the number of teenage marriages was growing in all regions of the country, but the rate of growth was not uniform. Numerical increases in the four regions were greatest in the South and West, moderate in the North Central, and smallest in the Northeast (table L). This reflects differences in the size and age composition of the population and variation in the rate of teenage marriage throughout the Nation.

Marked variation in teenage marriage rates was observed in 1960 among the four regions. Rates per 1,000 unmarried population aged 15-19 were highest in the South and West, lower in the North Central, and lowest in the Northeast. The South and West exhibited similar rates that were substantially above the national rates. The Northeast, on the other hand, had rates about one-half those in the South and West and appreciably below the U.S. rates. The North Central Region had rates closest to the national rates. Marriage rates per 1,000 unmarried population aged 15-19 by region in 1960 were as shown in table M.

Data are not available for computing comparable rates for 1969. However, regional data for the MRA in 1969 showed similar relationships in the proportions of total marriages involving teenagers (table N). The highest proportion of teenage marriages occurred in the South, which was followed by the North Central and West with intermediate proportions and the Northeast with the smallest proportion.

In the South, one-half of all first marriages involved women under 20, and nearly one-fifth

Table L. Estimated number of teenage brides and grooms, with percent change: United States and each geographic region, 1960 and 1969

[By area of occurrence. See appendix for method of computation]

| Region | Bride | | | Groom | | |
|---|---|---|---|---|---|---|
| | 1969 | 1960 | Percent change | 1969 | 1960 | Percent change |
| United States | 717,000 | 557,000 | +28.7 | 311,000 | 201,000 | +54.7 |
| Northeast | 102,000 | 92,000 | +10.9 | 38,000 | 29,000 | +31.0 |
| North Central | 185,000 | 152,000 | +21.7 | 83,000 | 58,000 | +43.1 |
| South | 291,000 | 214,000 | +36.0 | 131,000 | 77,000 | +70.1 |
| West | 140,000 | 99,000 | +41.4 | 59,000 | 38,000 | +55.3 |

involved women under 18. In the Northeast, however, less than one-third of all first marriages were to women under 20, and a much smaller proportion were to women under 18.

Over one-fifth of all grooms in the South marrying for the first time were under 20, twice the proportion in the Northeast, and very early marriage, at ages under 18, was most predominant in the South (figure 3).

The majority of States observed the pattern occurring in their region. Rankings were assigned to 44 States and the District of Columbia on a scale from highest to lowest for proportions of total marriages in 1969 involving teenagers (figure 4). Most States with high rankings (where 40 percent or more of all brides were under age 20) were located in the South. An exception was Utah, in the West. Most States with low rankings (30 percent and less) were situated in the Northeast.

It is interesting that the States with the highest and lowest values were in the same region. In the South, Kentucky had the highest proportion of

Table M. Teenage marriage rates, by sex: United States and each geographic region, 1960

[By area of occurrence. Rates per 1,000 unmarried population in specified group. See appendix for method of computation]

| Region | Female | Male |
|---|---|---|
| United States | 100.3 | 31.2 |
| South | 121.6 | 35.2 |
| West | 120.6 | 37.5 |
| North Central | 95.8 | 32.6 |
| Northeast | 66.2 | 19.5 |

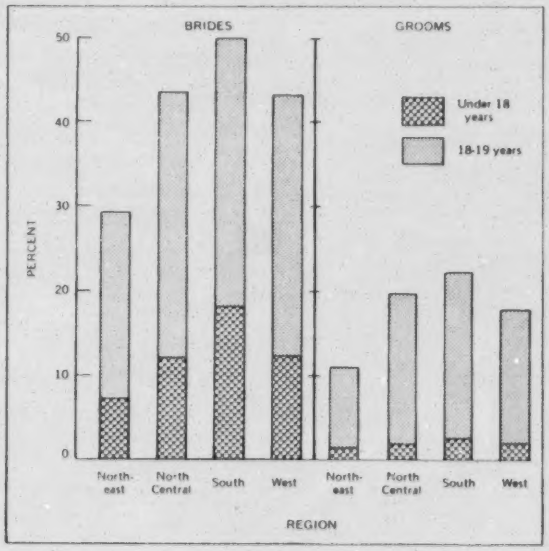


Figure 3. Percent of first marriages involving teenage brides and grooms, by age: marriage-registration area States grouped by geographic region, 1969.

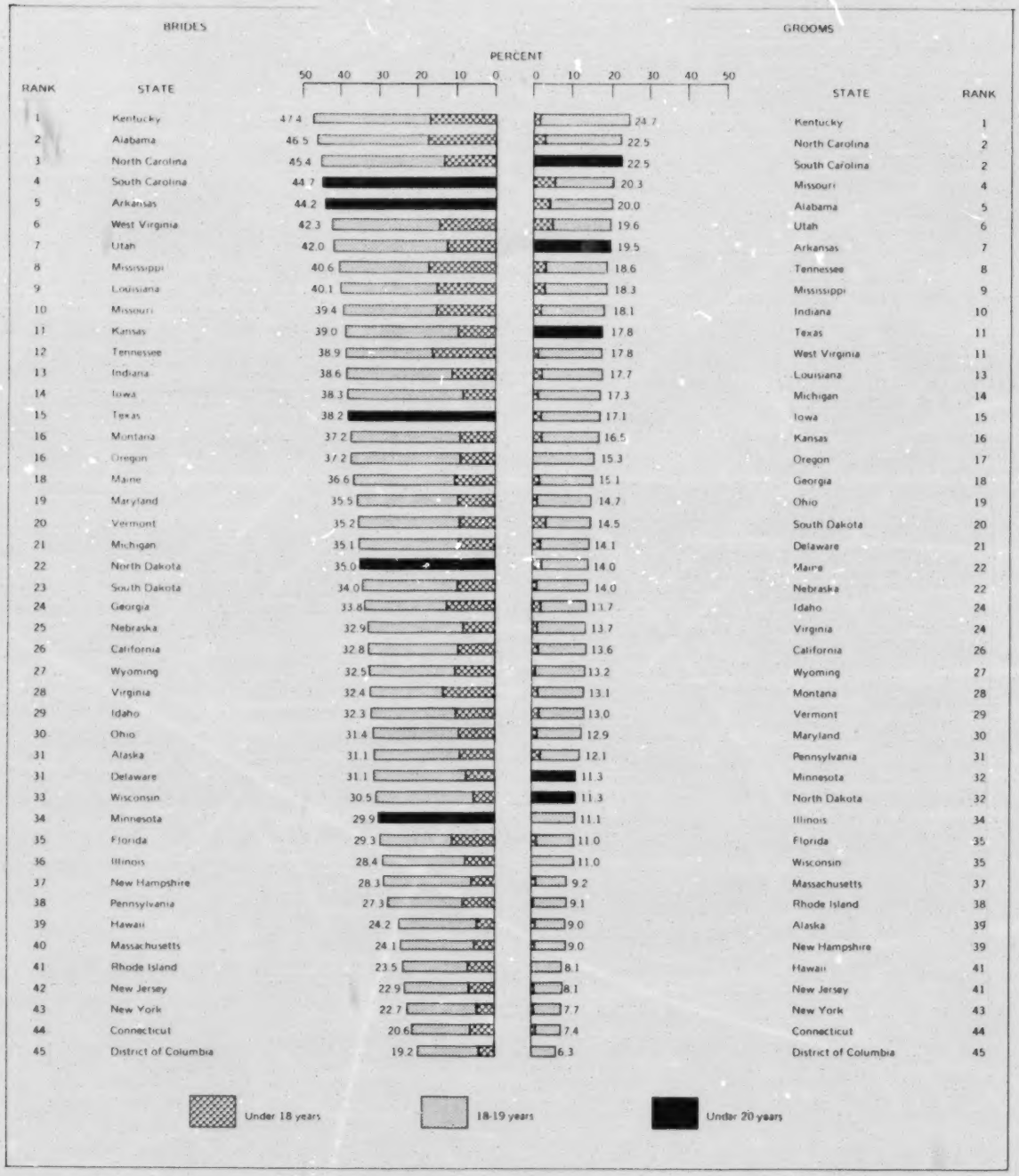
BRIDES
GROOMS
PERCENT
50 40 30 20 10 0
0 10 20 30 40 50
RANK
STATE
STATE
RANK
1 Kentucky 47.4 24.7 Kentucky 1
2 Alabama 46.5 22.5 North Carolina 2
3 North Carolina 45.4 22.5 South Carolina 2
4 South Carolina 44.7 20.3 Missouri 4
5 Arkansas 44.2 20.0 Alabama 5
6 West Virginia 42.3 19.6 Utah 6
7 Utah 42.0 19.5 Arkansas 7
8 Mississippi 40.6 18.6 Tennessee 8
9 Louisiana 40.1 18.3 Mississippi 9
10 Missouri 39.4 18.1 Indiana 10
11 Kansas 39.0 17.8 Texas 11
12 Tennessee 38.9 17.8 West Virginia 11
13 Indiana 38.6 17.7 Louisiana 13
14 Iowa 38.3 17.3 Michigan 14
15 Texas 38.2 17.1 Iowa 15
16 Montana 37.2 16.5 Kansas 16
16 Oregon 37.2 15.3 Oregon 17
18 Maine 36.6 15.1 Georgia 18
19 Maryland 35.5 14.7 Ohio 19
20 Vermont 35.2 14.5 South Dakota 20
21 Michigan 35.1 14.1 Delaware 21
22 North Dakota 35.0 14.0 Maine 22
23 South Dakota 34.0 14.0 Nebraska 22
24 Georgia 33.8 13.7 Idaho 24
25 Nebraska 32.9 13.7 Virginia 24
26 California 32.8 13.6 California 26
27 Wyoming 32.5 13.2 Wyoming 27
28 Virginia 32.4 13.1 Montana 28
29 Idaho 32.3 13.0 Vermont 29
30 Ohio 31.4 12.9 Maryland 30
31 Alaska 31.1 12.1 Pennsylvania 31
31 Delaware 31.1 11.3 Minnesota 32
33 Wisconsin 30.5 11.3 North Dakota 32
34 Minnesota 29.9 11.1 Illinois 34
35 Florida 29.3 11.0 Florida 35
36 Illinois 28.4 11.0 Wisconsin 35
37 New Hampshire 28.3 9.2 Massachusetts 37
38 Pennsylvania 27.3 9.1 Rhode Island 38
39 Hawaii 24.2 9.0 Alaska 39
40 Massachusetts 24.1 9.0 New Hampshire 39
41 Rhode Island 23.5 8.1 Hawaii 41
42 New Jersey 22.9 8.1 New Jersey 41
43 New York 22.7 7.7 New York 43
44 Connecticut 20.6 7.4 Connecticut 44
45 District of Columbia 19.2 6.3 District of Columbia 45
Under 18 years
18-19 years
Under 20 years

Figure 4. State rankings by percent of all marriages involving teenage brides and grooms, by age: 44 reporting States and the District of Columbia, 1969.

Table N. Percent distribution of brides and grooms at specified ages by marriage order: marriage-registration area and each geographic region, 1969

[By area of occurrence. Based on sample data]

| Sex and age | Marriage-registration area | Region | | | |
|---|---|---|---|---|---|
| | | Northeast | North Central[1] | South[2] | West[3] |
| **Bride** | | | | | |
| All marriages | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under 20 years | 32.6 | 24.5 | 33.7 | 37.8 | 33.3 |
| Under 18 years | 9.8 | 6.0 | 9.2 | 13.5 | 9.4 |
| 18-19 years | 22.8 | 18.4 | 24.4 | 24.3 | 23.9 |
| 20 years and over | 67.4 | 75.6 | 66.3 | 62.2 | 66.7 |
| First marriages | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under 20 years | 41.4 | 29.0 | 43.3 | 49.9 | 43.1 |
| Under 18 years | 12.5 | 7.1 | 12.0 | 18.1 | 12.3 |
| 18-19 years | 28.9 | 21.9 | 31.3 | 31.8 | 30.8 |
| 20 years and over | 58.6 | 71.0 | 56.7 | 50.1 | 56.9 |
| **Groom** | | | | | |
| All marriages | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under 20 years | 13.9 | 9.2 | 15.2 | 16.7 | 13.7 |
| Under 18 years | 1.5 | 1.2 | 1.4 | 1.9 | 1.3 |
| 18-19 years | 12.5 | 8.0 | 13.9 | 14.8 | 12.3 |
| 20 years and over | 86.1 | 90.8 | 84.8 | 83.3 | 86.3 |
| First marriages | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under 20 years | 18.0 | 11.0 | 19.8 | 22.3 | 17.8 |
| Under 18 years | 1.9 | 1.4 | 1.7 | 2.5 | 1.8 |
| 18-19 years | 16.1 | 9.7 | 18.1 | 19.8 | 16.1 |
| 20 years and over | 82.0 | 89.0 | 80.2 | 77.7 | 82.2 |

[1]Excludes Minnesota and North Dakota.
[2]Excludes Arkansas, Oklahoma, Texas, and South Carolina.
[3]Excludes Colorado, New Mexico, Arizona, Nevada, and Washington.

teenage marriages, 47 percent for brides and 25 percent for grooms, while the District of Columbia had the lowest, 19 percent for brides and 6 percent for grooms.

### State Marriage Laws

A number of factors affect the incidence of teenage marriage in a particular State and variation between States within the same geographic division and region. Among them are State marriage laws and population composition by age, race, sex, and marital status.

Laws regarding age at marriage are established by a State for marriages that occur within its jurisdiction. In most States marriage is permitted with parental consent if the groom is at least 18 years old and the bride at least 16 years. In 1969, 15 States had legal minimum age with consent for males below this standard; no State had a higher minimum; and one State had no provision in its law. The age for females was lower than 16 in 11 States and higher in two.

Generally, the legal minimum age without parental consent is 21 for males and 18 for

females. This age requirement was lower for males in nine States and higher for females in 14 States; no State had a higher requirement for males nor a lower requirement for females. Practically all States have established procedures whereby younger parties may obtain licenses to marry in case of special circumstances such as pregnancy or parenthood.

To some extent teenage marriage occurs more frequently in States which are permissive in their standards regarding age at marriage. Of the States for which data on age at marriage were available in 1969, 20 had a relatively low legal minimum age for at least one partner. Of these 20 States, 12 had proportions of teenage marriages above the U.S. average of 33.4 for brides and 14.5 for grooms. These States are Kentucky, Alabama, North Carolina, South Carolina, Utah, Mississippi, Missouri, Tennessee, Texas, Oregon, Michigan, and Georgia. Seven of the 12 States are located in the South. All but three of the 12 States allowed females under 16 years, males under 18, or both to marry with parental consent.

Legislation regarding age at marriage was revised or enacted in several States during the sixties. A review of the nature of these revisions showed three distinct trends: (1) more uniformity brought about by States raising or lowering their legal minimum age to the standard limits, (2) a legal minimum age corresponding to the legal voting age, and (3) lessening of the gap in age requirements by sex.

Changes in marriage laws may affect year-to-year differences in the number of teenagers married in the State where the change is enacted and also in adjacent States.

Following a change in the Iowa marriage law that raised the legal minimum age with parental consent, the number of teenagers married in that State fell from 15,020 in 1960 to 10,740 in 1962, the first full year after the change—a 29-percent decline.

A change of even greater magnitude occurred in Idaho in 1967 after the law was revised to raise the legal minimum age with and without consent and to establish a 3-day waiting period. The number of teenagers married declined from 12,665 in 1966 to 5,020 in 1968, a 60-percent drop. Increases, although small, occurred in the adjoining States of Montana, Oregon, Utah, and Wyoming. Counts of marriages by age were not available for the adjoining States of Nevada and Washington.

In addition, decreases were observed in Montana between 1960 and 1962 after a 5-day waiting period before issuance of license was instituted, in Rhode Island between 1961 and 1962 after Massachusetts reduced its waiting period from 5 to 3 days, and in the District of Columbia between 1966 and 1967 after a blood test for venereal disease became mandatory.

The opposite effect was produced in Kentucky when limits were relaxed for both partners in marriage without parental consent. The number of teenagers marrying rose from 18,030 in 1967 to 26,190 in 1969, the first full year after the change—a 45-percent increase.

Effective in 1969, Texas lowered the age at which consent for males is required and dropped the 3-day waiting period before issuance of a license. The number of brides and grooms under 20 marrying in Texas increased from 62,135 in 1968 to 79,863 in 1969 (an increase of 29 percent).

In Hawaii, which had large numbers of servicemen on rest and rehabilitation programs, a lower age requirement for females and the abolition of a 3-day waiting period before issuance of a license raised the number of teenagers marrying from 2,592 in 1968 to 3,194 in 1969—a 23-percent increase after the law had been in effect for only 6 months.

### International Comparisons

The United States has a relatively high teenage marriage rate compared with other industrialized nations. Rates for selected countries, as published in the United Nations *Demographic Yearbook, 1968,* are shown in table O. For men, the United States had the highest teenage marriage rate of any country for which comparative data were available; its teenage marriage rate for women was exceeded only in Romania, Bulgaria, Australia, and Hungary.

Marriage rates for teenage women in the United States were closest to those for Hungary, New Zealand, and Australia and considerably higher than those for the British Isles and Western Europe. The rate for teenage males in the United States was twice the rates for most of the

Table 0. Teenage marriage rates, by sex: United States and selected countries, 1960 and 1966

[Rates based on number of marriages in which the bride and groom were under 20 years of age, per 1,000 unmarried female and male population aged 15-19 years enumerated that year. Data are formal marriages, the legality of which may be established by civil, religious, or other means recognized by the law of the country. Populations used in computing rates were from census data, postcensal estimates, or results of a sample survey]

| Country | 1966 | | 1960 | |
|---|---|---|---|---|
| | Female | Male | Female | Male |
| Romania | 110.9 | 12.0 | --- | --- |
| Bulgaria[1] | [2]99.5 | [2]14.9 | --- | --- |
| Australia[3,4] | 98.4 | 14.9 | [5]56.8 | [5]10.5 |
| Hungary | 90.8 | 12.0 | 96.3 | 15.4 |
| United States | [6]89.0 | [6]34.5 | 100.3 | 31.3 |
| New Zealand[7] | 83.4 | 18.5 | [5]76.6 | [5]13.4 |
| Czechoslovakia | 71.9 | 10.4 | [5]78.4 | [5]8.1 |
| England and Wales[3] | 66.2 | 17.8 | 57.7 | 11.7 |
| Scotland[3] | 65.2 | 23.4 | 53.1 | 14.1 |
| Austria[1] | 64.0 | 9.3 | [5]52.2 | [5]8.3 |
| East Germany (incl. E. Berlin) | 60.6 | 9.6 | --- | --- |
| West Germany (excl. W. Berlin) | [8]58.2 | [8]5.5 | 43.8 | 4.4 |
| Canada | 56.8 | 12.7 | [5]63.3 | [5]12.2 |
| Denmark | 52.5 | 8.7 | 45.1 | 5.7 |
| Luxembourg | 47.7 | 5.6 | 41.5 | 3.2 |
| Finland[9] | [2]47.1 | [2]13.4 | 39.5 | 10.4 |
| Portugal | 43.7 | 12.8 | 34.0 | 6.9 |
| France[10] | 41.5 | 5.8 | 34.6 | 5.3 |
| Sweden | 40.0 | 5.7 | 27.9 | 3.7 |
| Northern Ireland[3] | 36.3 | 10.9 | [5]29.7 | [5]7.6 |
| Netherlands | 36.0 | 8.1 | 25.0 | 4.7 |
| Ireland[3] | 14.2 | 3.5 | [5]10.5 | [5]2.2 |
| Japan[1] | [2]5.1 | [2]0.5 | 6.3 | 0.5 |

[1]Excluding marriages of aliens temporarily in area.
[2]Data for 1965.
[3]Data tabulated by year of registration rather than year of occurrence.
[4]Excluding full-blooded aborigine population.
[5]Data for 1961.
[6]Computed on estimated number of teenage marriages.
[7]Computed on population aged 16-19 years.
[8]Provisional data.
[9]Based on marriages for which bride was domiciled in country.
[10]Including armed forces stationed outside country.

SOURCE: United Nations Demographic Yearbook, 1968. New York. United Nations, 1969. Table 28.

English-speaking countries and 3 or 4 times the rates in many European countries. Canada had early marriage rates closer to those observed in European countries than to those of the neighboring United States. In Ireland, where late marriage is customary, the teenage marriage rate for women was one-sixth the rate in the United States, and the rate for men was one-tenth the U.S. rate. Japan, the only non-Western country for which reasonably comparable data are available, reported extremely low teenage marriage rates.

Early marriage may be more common in countries for which data are lacking or too incomplete for inclusion here, e.g., those in Africa, Asia, and Latin America. Common law unions, i.e., couples living together without a

Table P. Ratio of teenage marriage rate for females to rate for males: United States and selected countries, 1966

[Ratios computed from rates shown in table O]

| Country | Ratio of teenage marriage rate female/male |
|---|---|
| Romania | 9.2 |
| Bulgaria[1,2] | 6.7 |
| Australia[3] | 6.6 |
| Hungary | 7.6 |
| United States[4] | 2.6 |
| New Zealand[5] | 4.5 |
| Czechoslovakia | 6.9 |
| England and Wales | 3.7 |
| Scotland | 2.8 |
| Austria[1] | 6.9 |
| East Germany (incl. E. Berlin) | 6.3 |
| West Germany (excl. W. Berlin)[6] | 10.6 |
| Canada | 4.5 |
| Denmark | 6.0 |
| Luxembourg | 8.5 |
| Finland[2,7] | 3.5 |
| Portugal | 3.4 |
| France[8] | 7.2 |
| Sweden | 7.0 |
| Northern Ireland | 3.3 |
| Netherlands | 4.4 |
| Ireland | 4.1 |
| Japan[1,2] | 10.2 |

[1]Excluding marriages of aliens temporarily in area.
[2]Data for 1965.
[3]Excluding full-blooded aborigine population.
[4]Computed on estimated number of teenage marriages.
[5]Computed on population aged 16-19 years.
[6]Provisional data.
[7]Based on marriages for which bride was domiciled in country.
[8]Including armed forces stationed outside country.

formal or recognized marriage, are believed to be prevalent in these areas. Census enumerations in these countries have shown high proportions married among the teenage population, while the vital statistics show few teenage marriages.

During the sixties the general trend in U.S. teenage marriage rates has been downward for females and slightly upward for males, while rates in most European countries have increased for both females and males. Of the countries listed in table O, only Hungary, Czechoslovakia, Canada, and Japan did not show increases.

In all countries shown, the teenage marriage rate was much higher for women than for men. The difference was less in the United States than in any of the other countries. The greatest difference between the teenage marriage rates for men and for women was observed in West Germany and Japan, where the rate for women was 10 times the rate for men (table P). Next to the United States, where the rate for women was only about 2½ times the rate for men, the smallest differences were in Scotland and Northern Ireland.

## DIVORCES

Concern over teenage marriage focuses on the stability of these unions and whether they are more likely to end in divorce than marriages contracted at older ages. In 1969 an estimated 28,000 teenage women and 6,000 teenage men were granted divorces. Expressed as divorce rates, approximately 28 of every 1,000 teenage wives and 19 of every 1,000 teenage husbands were granted a divorce during that year. For women this teenage divorce rate was a little lower than for those aged 20-24 but higher than for any other age group. For men the divorce rate was lower than the rates not only for those aged 20-24 but also for those aged 25-29 and 30-34 (table Q).

Annual age-specific divorce rates, relating the number of divorces granted during a year by age at divorce to the married population at the same ages, do not adequately reflect the instability of teenage marriages. A major consideration is the very short time a marriage is at risk of ending in divorce during teenage years. A person who marries at age 19 scarcely has time to obtain a divorce while still a teenager. Since in most States the legal requirements alone result in lapses of at least several months, many relatively quick breakups of teenage marriages do

Table Q. Estimated number and rate of divorces, by age at time of decree and sex: United States, 1969

[See appendix for method of computation. Rates per 1,000 married population in specified group]

| Age | Female | | Male | |
|---|---|---|---|---|
| | Number | Rate | Number | Rate |
| All ages--- | 639,000 | 13.4 | 639,000 | 13.8 |
| Under 20 years--- | 27,900 | 28.2 | 5,800 | 19.0 |
| 20-24 years------ | 153,700 | 30.7 | 102,000 | 34.0 |
| 25-29 years------ | 136,200 | 24.3 | 139,800 | 27.7 |
| 30-34 years------ | 89,800 | 17.8 | 102,700 | 21.8 |
| 35-44 years------ | 136,900 | 13.1 | 154,900 | 15.5 |
| 45-54 years------ | 68,800 | 7.1 | 90,600 | 9.3 |
| 55-64 years------ | 20,200 | 3.1 | 32,100 | 4.3 |
| 65 years and over---------- | 5,500 | 1.4 | 11,200 | 1.9 |

not show up in the teenage divorce rate. The effect of this time factor is even greater for men than for women because most teenage grooms are at the upper end of the age group and are exposed to the risk of divorce only a very short time before leaving the teenage group.

Although data are not available for computing divorce rates by age at marriage, other methods have been used to demonstrate the relative instability of teenage marriages. One of these is a comparison of the proportion of brides and grooms under 20 years of age with the proportion of divorcing persons who had married when under 20. This was done for the years 1957-65 for a uniform group of 15 States.[3] The percentage of teenage marriages was considerably higher among divorcing persons than among those who married, indicating that teenage marriages are more likely to end in divorce than marriages occurring at other ages. This was true for both sexes for all years included in the study.

For the present report, a comparison was made of 21 selected States in the years 1960-69, and similar results were obtained (table R and figure 5). These findings are compatible with those from another source. In its recent publication "Social and Economic Variations in Marriage, Divorce, and Remarriage: 1967," Series P-20,

[3] National Center for Health Statistics: Divorce statistics analysis, United States, 1964 and 1965. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 21-No. 17. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1969. pp. 6 and 31.

Table R. Percent of brides and grooms and of divorced husbands and wives married when teenagers: 21 selected registration States,[1] 1960-69

[Based on sample data. Computed on totals excluding figures for age not stated]

| Year | Bride | Divorced wife | Groom | Divorced husband |
|---|---|---|---|---|
| 1969------ | 34.1 | 48.7 | 14.9 | 21.1 |
| 1968------ | 34.3 | 49.2 | 15.1 | 20.7 |
| 1967------ | 35.5 | 48.4 | 15.5 | 20.9 |
| 1966------ | 38.1 | 48.0 | 17.2 | 19.5 |
| 1965------ | 37.9 | 48.0 | 15.1 | 19.2 |
| 1964------ | 36.8 | 48.0 | 13.2 | 19.7 |
| 1963------ | 36.9 | 46.2 | 13.5 | 18.8 |
| 1962------ | 38.9 | --- | 14.5 | --- |
| 1961------ | 39.2 | --- | 14.0 | --- |
| 1960------ | 38.8 | --- | 13.4 | --- |

[1] Alabama, Alaska, Georgia, Hawaii, Idaho, Iowa, Kansas, Maryland, Michigan, Montana, Nebraska, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Utah, Virginia, Wisconsin, Wyoming.

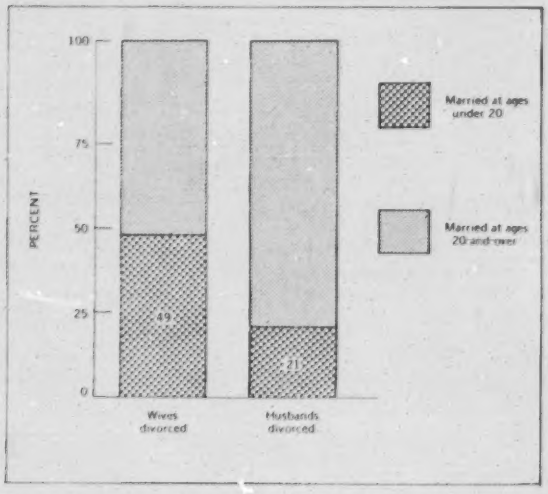


Figure 5. Percent of husbands and wives divorced in 1969 who had married as teenagers: 21 reporting States.

Table S. Percent of divorced husbands and wives who were teenagers at time of decree and percent married when teenagers: divorce-registration area and 20 reporting States, grouped by region, 1969

[Based on sample data. By place of occurrence. Computed on totals excluding figures for age not stated]

| Region and State | Divorced husbands who were teenagers at time of: | | Divorced wives who were teenagers at time of: | |
|---|---|---|---|---|
| | Decree | Marriage | Decree | Marriage |
| | Percent | | | |
| Divorce-registration area[1] | 0.9 | 19.2 | 4.4 | 45.8 |
| Northeast | 0.5 | 17.7 | 2.8 | 45.8 |
| Vermont | 0.4 | 19.5 | 2.6 | 51.4 |
| Rhode Island | 0.3 | 16.3 | 2.1 | 44.8 |
| Connecticut | 0.2 | 15.2 | 1.9 | 42.1 |
| New York | 0.5 | 15.3 | 2.2 | 43.6 |
| Pennsylvania | 0.7 | 20.6 | 3.7 | 48.9 |
| North Central | 1.0 | 19.4 | 5.3 | 47.0 |
| Illinois | 0.8 | 17.6 | 4.5 | 45.1 |
| Wisconsin | 0.3 | 16.9 | 2.0 | 48.1 |
| Iowa | 1.8 | 22.9 | 6.4 | 50.2 |
| Missouri | 1.3 | 22.0 | 6.7 | 48.1 |
| Nebraska | 0.8 | 17.3 | 5.6 | 46.2 |
| Kansas | 1.7 | 21.8 | 7.3 | 49.5 |
| South | 1.6 | 25.1 | 7.1 | 52.5 |
| Virginia | 0.5 | 24.1 | 3.4 | 52.3 |
| Kentucky | 1.8 | 25.7 | 9.2 | 52.4 |
| Tennessee | 2.2 | 25.5 | 8.8 | 52.7 |
| West | 0.6 | 16.2 | 2.9 | 40.8 |
| Montana | 1.3 | 12.7 | 6.2 | 41.2 |
| Idaho | 2.1 | 14.5 | 6.9 | 41.0 |
| Oregon | 1.0 | 16.9 | 4.1 | 44.0 |
| California | 0.5 | 16.4 | 2.5 | 40.7 |
| Alaska | 0.3 | 13.5 | 4.3 | 41.5 |
| Hawaii | 0.1 | 13.2 | 2.1 | 34.7 |

[1]Includes cases for Alabama, Georgia, Maryland, Michigan, Ohio, South Dakota, Utah, and Wyoming, which are not shown separately.

No. 223 of the *Current Population Reports*, on page 1, the U.S. Bureau of the Census reported that "27 percent of the women with teenage marriages were known to have been divorced within 20 or more years, as compared with 14 percent of those who entered first marriage after they had reached their twenties." The same comparison was not made for teenage men, but "28 percent of those who married before the age of 22 years were known to have been divorced, as compared with 13 percent of those who married for the first time after they had reached 22 years of age." (These

figures are based on a nationwide survey conducted for the Office of Economic Opportunity in the early months of 1967.) In other words, divorce was twice as likely for early marriages as for those contracted at later ages.

Persons who married before age 20 account for varying proportions of divorces from State to State, and regional differences are apparent in the available figures (table S). In 1969 the highest proportion of such divorces was shown by the South (based on data for only three States of that region). The North Central and Northeast Regions ranked second and third, and in the West persons who had married in their teens accounted for the smallest proportion of divorces granted during the year, giving that region a rank of fourth.

As observed earlier, the South also accounted for the greatest proportion of teenage marriages. However, comparisons that may be made between marriage and divorce data by region are limited because data on divorces are not available for all States reporting marriage data.

## PARENTHOOD

In 1968, the latest year for which natality statistics were available for inclusion in this report, there were 600,816 births to teenage mothers. This comprised 17 percent of all births in the United States during that year. Of these births, 591,312 (98 percent) were to mothers 15-19 years of age, and 9,504 (2 percent) were to mothers under 15 years of age. In terms of birth order, it was a first child in 77 percent of these births, a second child in 18 percent, and a third or higher order child in 4 percent.

### Birth Rates

Birth rates, in which all live births to women 15-19 years of age are related to the total married and unmarried female population of those ages, show that 6.6 percent of teenage women 15-19 years of age gave birth to a child during 1968, the lowest birth rate of any age group between ages 15 and 35 (table T).

On the other hand, birth rates for married women, in which legitimate live births are related to the population of married women, indicate that almost half (46 percent) of the married women at ages 15-19 gave birth to a child in 1968. This was higher by far than the birth rate for any other age group of married women. Only about one-fourth of the married women aged 20-24, the group with the next highest birth rate, gave birth to a child in that year (table U).

Table T. Birth rates by age of mother, with percent change: United States, 1960 and 1968

[Rates are live births per 1,000 women in specified group]

| Age | 1968 | 1960 | Percent change |
|---|---|---|---|
| 15-44 years[1] | 85.7 | 118.0 | -27.4 |
| 10-14 years | 1.0 | 0.8 | +25.0 |
| 15-19 years | 66.1 | 89.1 | -25.8 |
| 20-24 years | 167.4 | 258.1 | -35.2 |
| 25-29 years | 140.3 | 197.4 | -28.9 |
| 30-34 years | 74.9 | 112.7 | -33.6 |
| 35-39 years | 35.6 | 56.2 | -36.7 |
| 40-44 years | 9.6 | 15.5 | -38.1 |
| 45-49 years | 0.6 | 0.9 | -33.3 |

[1]Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

The birth rate for all women aged 15-19 declined steadily during the sixties—from 89 per 1,000 in 1960 to 66 per 1,000 in 1968 (table W). This happened during a period when birth rates were declining rapidly for women at other ages. In fact, as shown in table T, the group aged 15-19 showed the least reduction of any age group except the 10-14 group, where the rate, though very small, was actually higher in 1968 than in 1960.

The birth rate for married women aged 15-19 was slightly lower in 1968 than in 1960, but when legitimate live births were related to the population of married women at specific ages, the teenage group was the only age group that did not show a consistent downward trend through the sixties (table U).

### Premarital Conceptions

Over one-fourth of the births to teenage women in 1968 were illegitimate. This figure probably understates considerably the extent of premarital conceptions among teenagers. Such a

Table U. Estimated birth rates for married women, by age of mother: United States, 1960-68

[Rates are legitimate live births per 1,000 married women in specified group. Legitimate births are estimated for the United States from data for registration areas in which legitimacy is reported]

| Year | 15-44 years | 15-19 years | 20-24 years | 25-29 years | 30-34 years | 35-39 years | 40-44 years |
|---|---|---|---|---|---|---|---|
| 1968 | 117.9 | 455.2 | 248.9 | 156.5 | 80.8 | 38.4 | 11.3 |
| 1967 | 119.0 | 432.6 | 246.6 | 158.5 | 85.1 | 41.5 | 11.6 |
| 1966 | 123.7 | 455.6 | 255.5 | 166.1 | 92.1 | 45.1 | 12.8 |
| 1965 | 131.1 | 452.9 | 279.7 | 178.9 | 101.1 | 50.1 | 14.1 |
| 1964 | 140.9 | 376.1 | 310.4 | 197.9 | 109.2 | 54.6 | 15.4 |
| 1963 | 146.3 | 490.1 | 325.5 | 205.7 | 114.2 | 55.5 | 15.4 |
| 1962 | 152.1 | 475.5 | 335.4 | 213.8 | 120.3 | 58.4 | 16.5 |
| 1961 | 156.5 | 538.1 | 349.1 | 221.2 | 124.6 | 60.9 | 17.1 |
| 1960 | 156.3 | 483.5 | 354.4 | 222.3 | 123.3 | 61.7 | 17.4 |

Table W. Birth rates for women 15-19 years of age: United States, 1960-68

[Rates are live births per 1,000 women in age group]

| Year | Rate |
|---|---|
| 1968 | 66.1 |
| 1967 | 67.9 |
| 1966 | 70.6 |
| 1965 | 70.4 |
| 1964 | 72.8 |
| 1963 | 76.4 |
| 1962 | 81.2 |
| 1961 | 88.0 |
| 1960 | 89.1 |

count would include conceptions that did not terminate in a live birth (for which no estimates are available) and births that were legitimized by marriage between the time of conception and birth, as well as illegitimate births.

Marriage because of pregnancy is not uncommon among teenagers. According to data from the 1964-66 National Natality Survey, 42 percent of the women 15-19 years for whom the interval from first marriage to legitimate first birth was reported had been married for less than 8 months.[4]

[4]National Center for Health Statistics: Interval between first marriage and legitimate first birth, United States, 1964-66. *Monthly Vital Statistics Report*, Vol. 18, No. 12, Supplement. Rockville, Md. Public Health Service, Mar. 27, 1970.

If these approximations held in 1968, and assuming that most of the first births tabulated as being within 8 months of first marriage were premarital conceptions, somewhere in the neighborhood of 60 percent of the infants born to teenage mothers that year were conceived out of wedlock.

### Illegitimate Births

In 1968, while accounting for 14 percent of legitimate births in the United States, teenage women accounted for 49 percent of illegitimate births (figure 6). The estimated 165,700 illegiti-

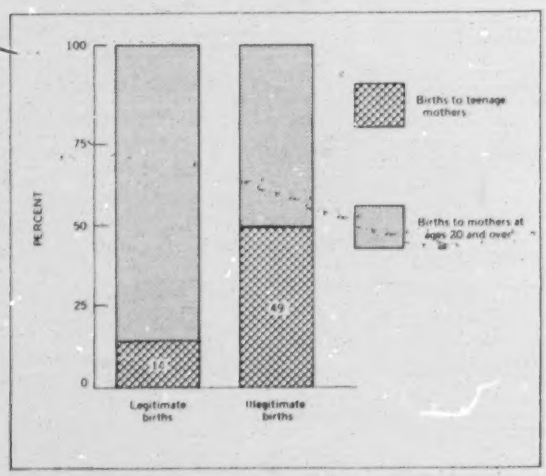


Figure 6. Percent of births to teenage mothers by estimated legitimacy status: United States, 1968.

mate births to teenage mothers that year were almost as many as were recorded for all other age groups of women combined. This count was about 80 percent above the number in 1960, a much greater increase than occurred in illegitimate births to women at all other ages (31 percent). In contrast, legitimate births to teenagers were 13 percent fewer than in 1960, a smaller decrease than the older women experienced (23 percent).

*Illegitimacy ratio.*—Illegitimate births accounted for a larger proportion of all births for teenage women than for women in any other age group. In 1968, an estimated 276 of every 1,000 births to women under 20 years of age were illegitimate, and the younger the teenage mother, the greater the likelihood of illegitimacy. At ages under 15 years an estimated 810 of every 1,000 births were illegitimate, at ages 15-17 the ratio was 404 per 1,000, and at ages 18-19 it was 201 per 1,000 (table Y).

A more detailed analysis of the illegitimacy ratios shows the same decline with increasing single years of age—the highest proportion of illegitimate births were at age 15 (625 per 1,000) and the proportion diminished at each single year thereafter, reaching 176 per 1,000 at age 19 (table 2).

The proportion of illegitimate live births increased for teenage mothers throughout the sixties (figure 7). From 1960 to 1968 the increase in the proportion of illegitimate births was greater for teenage mothers than for mothers in any other

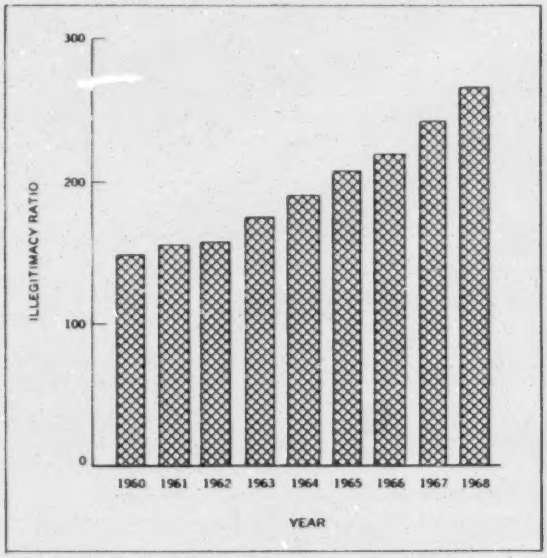


Figure 7. Estimated illegitimacy ratios per 1,000 live births for births to mothers aged 15–19: United States, 1960–68.

Table Y. Estimated number and ratio of illegitimate births, by age of mother and color: United States, 1968

[Due to rounding estimates to the nearest hundred, figures by color may not add to totals. Ratios per 1,000 total live births in specified group]

| Age | Number | | | Ratio | | |
|---|---|---|---|---|---|---|
| | Total | White | All other | Total | White | All other |
| Total | 339,200 | 155,200 | 183,900 | 96.9 | 53.3 | 312.0 |
| Under 15 years | 7,700 | 1,900 | 5,800 | 810.2 | 610.1 | 907.7 |
| 15-19 years | 158,000 | 67,400 | 90,600 | 267.2 | 158.0 | 549.7 |
| 15-17 years | 77,900 | 28,400 | 49,400 | 403.7 | 234.4 | 688.0 |
| 18-19 years | 80,100 | 39,000 | 41,200 | 201.1 | 127.7 | 443.0 |
| 20-24 years | 107,900 | 56,800 | 51,100 | 82.6 | 51.0 | 264.0 |
| 25-29 years | 35,200 | 16,100 | 19,100 | 38.9 | 20.4 | 168.0 |
| 30-34 years | 17,200 | 7,300 | 10,000 | 41.0 | 20.5 | 155.3 |
| 35-39 years | 9,700 | 4,200 | 5,500 | 47.1 | 24.5 | 157.2 |
| 40 years and over | 3,300 | 1,500 | 1,800 | 51.4 | 28.4 | 156.5 |

age group. The increase for teenagers was least at age 15 and more for each subsequent single year of age, being greatest at age 19, where the proportion almost doubled.

*Illegitimacy rate.*—Another measure of illegitimacy, the illegitimacy rate, relates the number of illegitimate live births to the unmarried females in specified age groups. In spite of the high proportion of illegitimate births to teenagers and the large proportion of the births to teenage mothers that were illegitimate, this measure shows that illegitimate births occurred less frequently among unmarried teenage women than among the unmarried women of any other age group under 35 years. In 1968 there were 20 illegitimate births per 1,000 unmarried females at ages 15-19. This rate was scarcely over half the rate for the next age group, 37 per 1,000 for women 20-24 years old.

The illegitimacy rate for teenage women increased during the sixties, more rapidly in the second half of the decade than in the first. In 1968 the illegitimacy rate was lower or only slightly higher than in 1960 for women in every age group except the group aged 15-19 years, whose rate increased nearly 30 percent, from 15.3 per 1,000 unmarried women in 1960, to 16.7 in 1965, to 19.8 in 1968 (table 3).

To summarize, the converse relationships of teenage women having the lowest birth rate of all women under 35 but the highest birth rate of married women reflect the following conditions:

There were a relatively large number of women in the age group 15-19 as compared with older age groups.

In the age group 15-19 the proportion of married women was much smaller than the proportion married at older ages.

The number of births to women 15-19 years was large relative to the number of married women in that group but small relative to the total number of women in the age group.

Similarly, teenage women had the "highest illegitimacy ratio" but one of the "lowest illegitimacy rates" because:

A large proportion of the births to women aged 15-19 were illegitimate.

Although the number of illegitimate births to women 15-19 years was larger than for those in any other age group, it was small relative to the large population of unmarried women in that group.

These relationships are evident when the population figures and number of births for women in the age group 15-19 are compared with those for the 20-24 group. The comparison for 1968 is shown in table Z.

Table Z. Marital status of population and legitimacy status of births for females at ages 15-19 and 20-24: United States, 1968

| Status | Age of females | |
|---|---|---|
| | 15-19 years | 20-24 years |
| Population | | |
| Total | 8,949,000 | 7,809,000 |
| Married | 952,000 | 4,818,000 |
| Unmarried | 7,997,000 | 2,991,000 |
| Births | | |
| Total | 591,312 | 1,306,872 |
| Legitimate | 433,312 | 1,198,972 |
| Illegitimate | 158,000 | 107,900 |

## Births by Color

Of the births to teenage women in 1968, 429,616 (72 percent) were to white mothers and 171,200 (28 percent) were to mothers of all other races. The birth rate for teenage women of all other races was much higher than that for white women and this difference was far greater for teenagers than for any other age group. The comparison for 1968 is shown in table AA.

*Birth order.*—The proportion of births to teenage women of all other races increased as birth order increased. Women of all other races accounted for one-fourth of the births of a first

Table AA. Birth rates, by age of mother and color: United States, 1968

[Rates are live births per 1,000 women in specified group]

| Age | Total | White | All other |
|---|---|---|---|
| 15-44 years[1] | 85.7 | 81.5 | 114.9 |
| 10-14 years | 1.0 | 0.4 | 4.4 |
| 15-19 years | 66.1 | 55.3 | 133.3 |
| 20-24 years | 167.4 | 162.6 | 200.8 |
| 25-29 years | 140.3 | 139.7 | 144.8 |
| 30-34 years | 74.9 | 72.5 | 91.2 |
| 35-39 years | 35.6 | 33.8 | 48.6 |
| 40-44 years | 9.6 | 8.9 | 15.0 |

[1]Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

child to teenage mothers, a little over one-third of the births of a second child, slightly above one-half for the third child, and nearly two-thirds for the fourth child. The distribution of births to teenage mothers by color and birth order for 1968 is shown in table BB.

Similarly, the birth rates by live-birth order for teenage women show increasing differences between white women and all other women as birth order increases. In 1968 approximately 45 per 1,000 white women at ages 15-19 gave birth to a first child and 11 per 1,000 gave birth to a second or higher order child. The corresponding rates for all other women at ages 15-19 were 90 per 1,000 for a first child and 43 per 1,000 for a second or higher order child. In other words, the rate for first births to all other women was about twice that for those to white women, but for second and higher order births it was about 4 times the rate of births to white women (table CC).

Table BB. Percent distribution of births to teenagers by color, according to live-birth order: United States, 1968

| Live-birth order | Total | White | All other |
|---|---|---|---|
| All births | 100.0 | 71.5 | 28.5 |
| First child | 100.0 | 74.7 | 25.3 |
| Second child | 100.0 | 63.8 | 36.2 |
| Third child | 100.0 | 48.3 | 51.7 |
| Fourth child | 100.0 | 36.7 | 63.3 |
| Fifth child and over | 100.0 | 31.0 | 69.0 |

*Illegitimate births.*—Of the illegitimate births to teenage women in 1968, 69,300 (42 percent) were to white mothers, and 96,400 (58 percent) were to mothers in the all other group. The proportion of illegitimate births accounted for by all other mothers varied markedly by age of mother. They accounted for 75 percent of the illegitimate births to girls at ages under 15 years, 63 percent at ages 15-17, and 51 percent at ages 18-19 (table Y).

Table CC. Births and birth rates for women 15-19 years of age, by live-birth order and color: United States, 1968

[Live-birth order refers to number of children born alive to mother. For birth rates, figures for birth order not stated are distributed. Birth rates are live births per 1,000 women in specified group]

| Color and live-birth order | Number | Rate |
|---|---|---|
| Total | 591,312 | 66.1 |
| First child | 455,006 | 50.9 |
| Second child | 110,744 | 12.4 |
| Third child | 20,942 | 2.3 |
| Fourth child | 3,536 | 0.4 |
| Fifth child and over | 670 | 0.1 |
| Not stated | 414 | ... |
| White | 426,502 | 55.3 |
| First child | 343,772 | 44.6 |
| Second child | 70,822 | 9.2 |
| Third child | 10,122 | 1.3 |
| Fourth child | 1,296 | 0.2 |
| Fifth child and over | 208 | 0.0 |
| Not stated | 282 | ... |
| All other | 164,810 | 133.3 |
| First child | 111,234 | 90.1 |
| Second child | 39,922 | 32.3 |
| Third child | 10,820 | 8.8 |
| Fourth child | 2,240 | 1.8 |
| Fifth child and over | 462 | 0.3 |
| Not stated | 132 | ... |

The illegitimacy ratio was considerably higher for births to all other mothers than for those to white mothers, and the difference was proportionately greater at the older ages. Illegitimate births per 1,000 live births to mothers in specified teenage color groups for 1968 are shown in table Y.

The illegitimacy rate for the all other group of teenage women 15-19 years in 1968 was over 8 times the rate for white teenage women. The rate was 9.8 illegitimate births per 1,000 unmarried white women and 82.8 illegitimate births per 1,000 unmarried women in the all other group.

### Trends in Births by Color

Natality statistics for the 1960's show a number of differences in trends among teenage women grouped by color.

*Birth rate.*—The decline from 1960 to 1968 in the birth rate for white teenagers 15-19 years was twice that for all other races, 30 percent compared with 16 percent. In 1960 the birth rate for all other women aged 15-19 was double the rate for white women at the same ages, and by 1968 it was 2½ times the rate for white (table DD).

*Illegitimacy ratio.*—From 1960 to 1968 the ratio of illegitimate births to total births for white teenage women remained well below that for all other teenage women but it showed a much greater increase, narrowing the difference between the ratios for the two groups. At ages 15-19 the illegitimacy ratio more than doubled for white women and increased only 30 percent for all other women in the same age group. For all other women the increase from 1960 to 1968 was about the same at single ages 17, 18, and 19, but for white women the percent increase was greater for each successive age, and at age 19 the 1968 illegitimacy ratio was 2½ times the 1960 ratio (table 2). This phenomenon was not restricted to teenagers. In every age group the percent increase in the illegitimacy ratio from 1960 to 1968 was far greater for white women than for all other women (table EE).

*Illegitimacy rates.*—This difference between color groups in the trend of illegitimacy is evident in the illegitimacy rates. From 1960 to 1968 the illegitimacy rate increased nearly 50 (48.5) percent for white women 15-19 years and only 8 percent for all other women in the same age group. In fact, for all other women the age group 15-19 years was the only age group showing an increase in illegitimacy rates; substantial declines were noted for all other age groups. Increases occurred for all age groups of white women, but the greatest was for teenagers (table 3).

Table DD. Birth rates, by age of mother and color, with percent change: United States, 1960 and 1968

[Rates are live births per 1,000 women in specified group]

| Age | White | | | All other | | |
|---|---|---|---|---|---|---|
| | 1968 | 1960 | Percent change | 1968 | 1960 | Percent change |
| 15-44 years[1] | 81.5 | 113.2 | -28.0 | 114.9 | 153.6 | -25.2 |
| 10-14 years | 0.4 | 0.4 | - | 4.4 | 4.0 | +10.0 |
| 15-19 years | 55.3 | 79.4 | -30.4 | 133.3 | 158.2 | -15.7 |
| 20-24 years | 162.6 | 252.8 | -35.7 | 200.8 | 294.2 | -31.7 |
| 25-29 years | 139.7 | 194.9 | -28.3 | 144.8 | 214.6 | -32.5 |
| 30-34 years | 72.5 | 109.6 | -33.9 | 91.2 | 135.6 | -32.7 |
| 35-39 years | 33.8 | 54.0 | -37.4 | 48.6 | 74.2 | -34.5 |
| 40-44 years | 8.9 | 14.7 | -39.5 | 15.0 | 22.0 | -31.8 |
| 45-49 years | 0.5 | 0.8 | -37.5 | 1.2 | 1.7 | -29.4 |

[1]Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

Table EE. Estimated illegitimacy ratios, by age of mother and color, with percent change: United States, 1960 and 1968

[Ratios per 1,000 total live births in specified group]

| Age | Total | | | White | | | All other | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1968 | 1960 | Percent change | 1968 | 1960 | Percent change | 1968 | 1960 | Percent change |
| Total------- | 96.9 | 52.7 | +83.9 | 53.3 | 22.9 | +132.8 | 312.0 | 215.8 | +44.6 |
| Under 15 years---- | 810.2 | 678.5 | +19.4 | 610.1 | 475.4 | +28.3 | 907.7 | 822.4 | +10.4 |
| 15-19 years------- | 267.2 | 148.4 | +80.1 | 158.0 | 71.6 | +120.7 | 549.7 | 421.5 | +30.4 |
| 20-24 years------- | 82.6 | 47.7 | +73.2 | 51.0 | 21.9 | +132.9 | 264.0 | 199.6 | +32.3 |
| 25-29 years------- | 38.9 | 29.4 | +32.3 | 20.4 | 11.4 | +78.9 | 168.0 | 141.3 | +18.9 |
| 30-34 years------- | 41.0 | 27.5 | +49.1 | 20.5 | 10.2 | +101.0 | 155.3 | 129.9 | +19.6 |
| 35-39 years------- | 47.1 | 29.5 | +59.7 | 24.5 | 12.7 | +92.9 | 157.2 | 127.7 | +23.1 |
| 40 years and over- | 51.4 | 31.0 | +65.8 | 28.4 | 15.8 | +79.7 | 156.6 | 116.8 | +34.1 |

## Infant Mortality

Infants born to teenage mothers face greater risks of death or deformity than infants born to women at older ages.

The infant mortality rate in the United States, which has not been brought down to the low levels attained by a number of economically and medically advanced Western European countries, has been looked upon with concern in recent years. In the search for possible causes it has been noted that risk of death is greatest for infants physically underdeveloped at time of birth and that the percentage of births in this category is greatest for births to very young mothers.

Table FF. Percent of live births with birth weight of 2,500 grams or less, by age of mother and color: United States, January-March 1950 and the year 1967

| Age | Total | | White | | All other | |
|---|---|---|---|---|---|---|
| | Jan.-March 1950[1] | 1967 | Jan.-March 1950[1] | 1967 | Jan.-March 1950[1] | 1967 |
| All ages---------- | 7.4 | 8.2 | 7.0 | 7.1 | 9.7 | 13.6 |
| Under 15 years---------- | 15.1 | 17.2 | 15.9 | 12.5 | 14.7 | 19.5 |
| 15-19 years---------- | 9.0 | 10.5 | 8.0 | 8.5 | 12.0 | 15.7 |
| 20-24 years---------- | 7.3 | 7.7 | 6.9 | 6.7 | 9.6 | 13.2 |
| 25-29 years---------- | 6.7 | 7.2 | 6.5 | 6.5 | 8.4 | 11.8 |
| 30-34 years---------- | 7.2 | 7.9 | 7.0 | 7.0 | 8.8 | 12.6 |
| 35-39 years---------- | 7.7 | 9.1 | 7.5 | 8.3 | 9.0 | 13.3 |
| 40-44 years---------- | 7.7 | 9.6 | 7.5 | 9.1 | 8.9 | 12.2 |
| 45 years and over---------- | 6.1 | 8.6 | 5.7 | 8.1 | 7.4 | 10.8 |

[1]Excludes all live births recorded in Massachusetts.

SOURCE: Vital and Health Statistics, Series 3, No. 15, p. 18.

In the United States, the risk of death in the first year of life among infants who weighed 2,500 grams or less at birth was found to be 17 times the risk among infants weighing more. In addition to the greater risk of death, there was greater prevalence among infants with low birth weight of such conditions as cerebral palsy, epilepsy, mental retardation, congenital anomalies, deafness, and blindness.[5] Infants born to teenage mothers are more likely to be of low birth weight than infants born to older mothers.

The proportion of infants weighing 2,500 grams or less at birth was highest among mothers at the youngest ages. The change in the incidence of infants with low birth weight by age of mother is shown in table FF.

## MORTALITY

The number of deaths among teenagers is small and the death rate from all causes combined is low. In 1969, 21,141 teenagers 15-19 years of age lost their lives, accounting for approximately 1 percent of the total deaths in the United States that year.

Differences in teenage mortality for all causes were observed among the sex-color groups. Teenage death rates were higher for males than for females and lower for white persons than for all other persons.

In both color groups the teenage death rate for males was about 2.5 times the rate for females. For both sexes the death rate for the all other group was about 1.5 times the rate for the white group.

From 1960 to 1969 the mortality rate for teenagers 15-19 years of age increased 25 percent, from 92 to 115 per 100,000 population. The increase was greater for all other males than for any of the other three color-sex groups, 42 percent as compared with increases of 23 percent for white males, 18 percent for all other females, and 17 percent for white females.

[5]National Center for Health Statistics: Trends in "prematurity," United States, 1950-67. *Vital and Health Statistics.* Series 3-No. 15. DHEW Pub. No. (HSM)72-1030. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Jan. 1972. pp. 1 and 2.

### Leading Causes

Accidents led all causes of death for teenagers 15-19 years of age. Sixty percent of the teenage deaths in 1969 were due to accidents; 40 percent were due to motor vehicle accidents alone. Homicide ranked second, and malignant neoplasms and suicide ranked third and fourth.

These rankings varied by color-sex group. Accidents ranked first for all four groups. Homicide was second for all other males and females. Malignant neoplasms ranked second for white teenagers, both male and female, and suicide ranked third. Neoplasms ranked third for all others. The fourth ranking cause was homicide for white males, influenza and pneumonia for white females, suicide for all other males, and diseases of heart for all other females (table 4).

Another difference in rank was for complications of pregnancy and childbirth, which was the fifth leading cause of death for all other women but tenth for white women.

The rise in teenage mortality during the sixties was due primarily to deaths from violent causes—accidents, homicide, and suicide. Death rates for the major nonviolent causes declined.

The mortality data by cause for 1968 and 1969 are not strictly comparable with those for prior years because of changes in classification and coding procedures that result from the decennial revision of The International Lists of Causes of Death. However, the trends in specific causes referred to in this report were not greatly affected by these changes.

*Motor vehicle accidents.*—In 1969 there were more deaths from motor vehicle accidents in the 15-19-year group than in any other 5-year age group except the 20-24 group. The death rate for teenagers, 47 per 100,000 in the age group 15-19 years, was among the highest of the age specific fatality rates for this cause (table GG). Motor vehicle accidents took a far greater toll among males than among females and more among white than all other (figure 8). The motor vehicle accident death rate for males 15-19 years of age was nearly 3 times the rate for females, and for white teenagers it was 1½ times the rate for all other teenagers (table 5).

This death rate for teenagers was nearly 40 percent higher in 1969 than in 1960. The in-

Table GG. Death rates for motor vehicle accidents, by age of person injured: United States, 1969

[Rate per 100,000 population]

| Age | Rate |
|---|---|
| All ages | 27.6 |
| Under 5 years | 11.6 |
| 5-9 years | 10.3 |
| 10-14 years | 9.3 |
| 15-19 years | 47.1 |
| 20-24 years | 55.5 |
| 25-29 years | 35.9 |
| 30-34 years | 28.2 |
| 35-39 years | 26.6 |
| 40-44 years | 25.0 |
| 45-49 years | 24.3 |
| 50-54 years | 26.4 |
| 55-59 years | 27.9 |
| 60-64 years | 28.9 |
| 65-69 years | 32.9 |
| 70-74 years | 38.3 |
| 75-79 years | 42.2 |
| 80-84 years | 44.1 |
| 85 years and over | 34.5 |

crease from 1960 to 1969 was greater for females than for males (an increase of 52 percent as compared with 35 percent). The rate increased more for all other males than for white males (40 percent versus 35 percent) and more for all other females than for white females (about 70 and 50 percent, respectively).

*Other accidents.*—Deaths due to other accidents, including drowning, firearm accidents, poisoning, and falls, also accounted for a large proportion of teenage deaths. In 1969 the death rate from these and other accidents was 20.7 per 100,000. Like motor vehicle accidents, they produced higher death rates for males than for females and for all others than for whites. Also, the rate increased from 1960 to 1969.

*Homicide.*—The homicide rate at ages 15-19 was 7.8 per 100,000 in 1969. Homicide occurred much more frequently among all other teenagers than among white teenagers and more frequently among males than among females. In 1969 the homicide rate for the all other group was 10 times the rate for white teenagers and the rate for males was 4 times the rate for females.

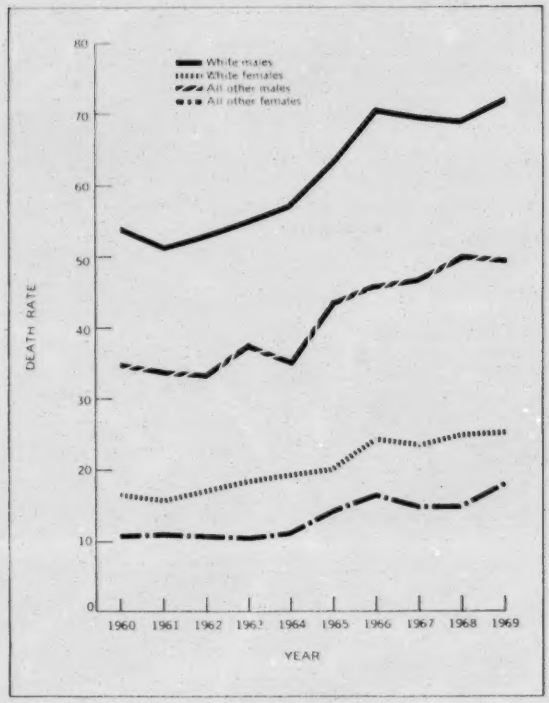


Figure 8. Death rates per 100,000 population for motor vehicle accidents for teenagers aged 15-19, by color and sex: United States, 1960-69.

From 1960 to 1969 the homicide rate among teenagers almost doubled. It more than doubled for all other males and the increases for all other females and white males and females ranged from 53 to 58 percent.

*Malignant neoplasms.*—In 1969, 7.2 per 100,000 teenagers 15-19 years of age died as a result of malignant neoplasms. The death rate for this cause was higher for white males than for all other males, but for females it was lower for the white group than for the all other.

The death rate for malignant neoplasms decreased from 1960 to 1969 for all of the color-sex groups except all other females. Although the number of deaths involved was small, for this group the rate increased 40 percent, from 4.3 to 6.0 per 100,000. In 1960, 35 deaths of all other females were assigned this cause, while in 1969 there were 77 deaths in this category.

*Suicide.*—In 1969, 5.7 per 100,000 teenagers 15-19 years of age committed suicide.

The rate was higher for males than for females, with a greater difference between sexes for white than for all other. The suicide rate was greater for white males (9.0) than for all other males (5.8) but lower for white females (2.6) than for all other females (3.2).

Suicide among teenagers increased from 1960 to 1969—relatively more for females than for males and more for all other than for white.

*Other causes.*—Declines for all four color-sex groups were observed for the following causes: major cardiovascular-renal diseases (the broad category that includes diseases of heart, acute rheumatic fever and chronic rheumatic heart disease, and cerebrovascular diseases), influenza and pneumonia. Deaths from deliveries and complications of pregnancy and childbirth declined. The death rate for congenital anomalies declined for white teenagers but increased for all others.

### Life Expectancy

Teenagers who lost their lives in 1969 had lived only about one-fourth as long as might reasonably have been expected at birth. According to life table values for 1969, males entering the age group 15-19 had an average life expectancy of 54 years and females a life expectancy of 61 years.

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Table 1. Number of teenage brides and grooms: United States, each region, division, and State, 1960-69

[By place of occurrence. Based on sample data unless otherwise noted. See appendix for estimating procedures for numbers of brides and grooms under 20 years of age for the United States and each region, 1965-69]

| Region, division, and State | 1969 | 1968 | 1967 | 1966 | 1965 | 1964 | 1963 | 1962 | 1961 | 1960 |
|---|---|---|---|---|---|---|---|---|---|---|
| | Bride | | | | | | | | | |
| United States[1] | 717,000 | 689,000 | 663,000 | 689,000 | 661,000 | --- | --- | --- | --- | 557,000 |
| Region:[1] | | | | | | | | | | |
| Northeast | 102,000 | 102,000 | 97,000 | 100,000 | 99,000 | --- | --- | --- | --- | 92,000 |
| North Central | 185,000 | 182,000 | 171,000 | 180,000 | 173,000 | --- | --- | --- | --- | 152,000 |
| South | 291,000 | 273,000 | 266,000 | 272,000 | 261,000 | --- | --- | --- | --- | 214,000 |
| West | 140,000 | 133,000 | 130,000 | 137,000 | 128,000 | --- | --- | --- | --- | 99,000 |
| New England: | | | | | | | | | | |
| Maine | 3,814 | 3,896 | 3,714 | 3,872 | 3,686 | 3,318 | 3,468 | 3,660 | 3,640 | 3,450 |
| New Hampshire | 2,894 | 2,764 | 2,904 | 3,022 | 2,978 | 2,590 | 2,576 | 2,670 | 2,590 | 2,740 |
| Vermont | 1,575 | 1,564 | 1,477 | 1,582 | 1,469 | 1,346 | 1,330 | 1,300 | 1,379 | 1,434 |
| Massachusetts | 11,330 | 11,040 | 10,680 | 11,450 | 10,490 | 9,380 | 10,120 | 10,580 | 10,120 | --- |
| Rhode Island | 1,760 | 1,718 | 1,542 | 1,684 | 1,744 | 1,628 | 1,552 | 1,580 | 1,910 | 1,840 |
| Connecticut | 5,100 | 5,010 | 4,835 | 5,235 | 4,940 | 4,380 | 4,255 | 4,800 | 4,660 | 4,560 |
| Middle Atlantic: | | | | | | | | | | |
| New York | 36,420 | 37,180 | 35,260 | 36,060 | 36,580 | [2]20,840 | [2]19,860 | [2]18,100 | [2]22,000 | [2]18,300 |
| New Jersey | 12,740 | 12,710 | 11,390 | 12,520 | 12,510 | 12,200 | 11,140 | 12,400 | 11,440 | 11,200 |
| Pennsylvania | 25,860 | 25,300 | 24,560 | 24,680 | 24,620 | 20,840 | 20,325 | 22,100 | 19,500 | 21,600 |
| East North Central: | | | | | | | | | | |
| Ohio | 28,400 | 29,080 | 26,900 | 29,320 | 26,820 | 25,000 | 22,525 | 22,900 | 22,200 | 21,500 |
| Indiana | 22,340 | 21,640 | 20,990 | 22,400 | 20,960 | 18,970 | 18,140 | 17,000 | 16,600 | --- |
| Illinois | 33,220 | 32,440 | 30,940 | 32,840 | 33,320 | 30,280 | --- | --- | --- | --- |
| Michigan[3] | 32,760 | 32,460 | 32,240 | 33,940 | 31,960 | 26,540 | 25,650 | 25,400 | 26,600 | 24,800 |
| Wisconsin | 10,480 | 10,150 | 9,420 | 9,700 | 10,030 | 8,960 | 7,950 | 8,780 | 8,740 | 9,560 |
| West North Central: | | | | | | | | | | |
| Minnesota[4] | 9,562 | 9,200 | 8,607 | 8,944 | 8,868 | --- | --- | --- | --- | --- |
| Iowa | 9,425 | 9,215 | 8,715 | 8,745 | 8,275 | 8,265 | 7,570 | 7,700 | 9,140 | 10,720 |
| Missouri | 19,880 | 19,150 | [2,4]15,148 | [2,4]15,574 | [2,4]14,996 | --- | --- | --- | --- | --- |
| North Dakota[4] | 1,890 | 1,767 | 1,842 | 1,934 | 1,962 | 1,903 | 1,866 | 1,794 | 1,868 | 1,760 |
| South Dakota | 3,708 | 3,592 | 3,158 | 3,238 | 3,274 | 3,182 | 2,846 | 2,900 | 2,760 | 2,610 |
| Nebraska | 4,980 | 4,395 | 4,335 | 4,295 | 4,335 | 4,215 | 4,380 | 4,000 | 4,320 | 4,600 |
| Kansas | 8,690 | 8,350 | 8,255 | 8,645 | 8,185 | 7,700 | 7,870 | 7,520 | 7,580 | 7,580 |
| South Atlantic: | | | | | | | | | | |
| Delaware | 1,238 | 1,155 | 1,106 | 1,108 | 1,093 | 1,051 | 990 | 934 | 909 | 886 |
| Maryland | 18,740 | 17,660 | 17,050 | 18,140 | 18,620 | 17,750 | 15,970 | 16,740 | 16,800 | 16,520 |
| District of Columbia | 1,490 | 1,620 | 1,688 | 2,272 | 2,016 | 2,136 | 2,534 | 2,840 | 2,540 | --- |
| Virginia | 17,030 | 17,320 | 16,930 | 16,680 | 16,380 | 15,310 | 15,380 | 14,600 | 14,340 | 12,860 |
| West Virginia | 6,610 | 6,595 | 6,240 | 6,585 | 6,245 | --- | --- | --- | --- | --- |
| North Carolina | 22,330 | 21,370 | 20,490 | 21,490 | 19,890 | 17,310 | --- | --- | --- | --- |
| South Carolina[4] | 25,127 | 24,622 | 23,970 | 24,159 | 23,963 | 20,912 | 19,995 | 20,116 | 19,485 | 18,997 |
| Georgia | 21,580 | 21,100 | 20,400 | 20,300 | 21,040 | 24,900 | 22,880 | 22,800 | 21,700 | 20,700 |
| Florida | 19,320 | 18,680 | 17,190 | 17,870 | 16,690 | 14,400 | 13,750 | 13,080 | 13,840 | 13,480 |
| East South Central: | | | | | | | | | | |
| Kentucky | 17,210 | 15,000 | 12,330 | 12,950 | 12,470 | 11,960 | 11,830 | 10,720 | 10,400 | 9,900 |
| Tennessee | 17,250 | 17,030 | 16,690 | 17,060 | 17,660 | 15,530 | 15,000 | 13,780 | 13,680 | 13,580 |
| Alabama | 21,580 | 20,530 | 20,190 | 20,430 | 19,470 | 17,960 | 16,840 | 16,620 | 16,500 | 14,980 |
| Mississippi | 10,550 | 10,390 | 9,850 | 10,365 | 10,045 | 9,825 | 9,375 | 9,880 | 9,720 | 9,580 |
| West South Central: | | | | | | | | | | |
| Arkansas[4] | 10,094 | 9,899 | 8,711 | 10,026 | 10,071 | --- | --- | --- | --- | --- |
| Louisiana | 13,870 | 13,660 | 12,810 | 13,200 | 12,355 | 11,300 | 10,945 | 11,160 | 10,540 | 10,600 |
| Oklahoma[3] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Texas[4] | 54,449 | 44,123 | 47,935 | 47,098 | --- | --- | --- | --- | --- | --- |
| Mountain: | | | | | | | | | | |
| Montana | 2,398 | 2,286 | 2,126 | 2,004 | 1,976 | 1,930 | 1,984 | 1,880 | 2,250 | 2,350 |
| Idaho | 3,545 | 3,490 | 3,190 | 8,250 | 7,450 | 6,575 | 6,100 | 6,020 | 5,560 | 5,160 |
| Wyoming | 1,387 | 1,342 | 1,167 | 1,215 | 1,251 | 1,200 | 1,149 | 1,149 | 1,237 | 1,228 |
| Colorado[3] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| New Mexico[3] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Arizona[3] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Utah | 4,810 | 4,170 | 4,196 | 3,848 | 3,676 | 3,430 | 3,660 | 3,730 | 3,560 | 3,690 |
| Nevada[3] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pacific: | | | | | | | | | | |
| Washington[3] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Oregon | 6,265 | 5,635 | 5,410 | 5,415 | 5,300 | 4,765 | 4,765 | 4,800 | 5,160 | 4,860 |
| California | 54,780 | 53,720 | 50,640 | 52,000 | 48,480 | 46,080 | 42,120 | 41,400 | 40,400 | 42,000 |
| Alaska | 986 | 938 | 803 | 774 | 755 | 677 | 644 | 643 | 734 | 617 |
| Hawaii | 2,396 | 1,964 | 1,654 | 1,356 | 1,398 | 1,388 | 1,508 | 1,390 | 1,300 | 1,500 |

See footnotes at end of table.

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Table 1. Number of teenage brides and grooms: United States, each region, division, and State, 1960-69—Con.

[By place of occurrence. Based on sample data unless otherwise noted. See appendix for estimating procedures for numbers of brides and grooms under 20 years of age for the United States and each region, 1965-69]

| Region, division, and State | 1969 | 1968 | 1967 | 1966 | 1965 | 1964 | 1963 | 1962 | 1961 | 1960 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Groom | | | | | |
| United States[1] | 311,000 | 294,000 | 285,000 | 299,000 | 252,000 | --- | --- | --- | --- | 201,000 |
| Region:[1] | | | | | | | | | | |
| Northeast | 38,000 | 38,000 | 37,000 | 39,000 | 33,000 | --- | --- | --- | --- | 29,000 |
| North Central | 83,000 | 81,000 | 74,000 | 78,000 | 67,000 | --- | --- | --- | --- | 58,000 |
| South | 131,000 | 119,000 | 119,000 | 124,000 | 103,000 | --- | --- | --- | --- | 77,000 |
| West | 59,000 | 55,000 | 55,000 | 58,000 | 49,000 | --- | --- | --- | --- | 38,000 |
| New England: | | | | | | | | | | |
| Maine | 1,458 | 1,416 | 1,480 | 1,484 | 1,376 | 1,206 | 1,162 | 1,370 | 1,480 | 1,170 |
| New Hampshire | 914 | 822 | 852 | 804 | 748 | 488 | 526 | 590 | 580 | 630 |
| Vermont | 583 | 581 | 537 | 588 | 509 | 410 | 451 | 489 | 499 | 441 |
| Massachusetts | 4,300 | 4,370 | 3,790 | 4,460 | 3,350 | 2,980 | 3,270 | 3,360 | 3,100 | --- |
| Rhode Island | 682 | 594 | 544 | 632 | 638 | 586 | 522 | 540 | 520 | 620 |
| Connecticut | 1,845 | 1,875 | 1,775 | 2,015 | 1,580 | 1,300 | 1,235 | 1,600 | 1,100 | 1,440 |
| Middle Atlantic: | | | | | | | | | | |
| New York | 12,320 | 12,120 | 12,100 | 12,080 | 10,580 | [2]5,280 | [2]5,720 | [2]5,400 | [2]6,400 | [2]5,400 |
| New Jersey | 4,500 | 4,080 | 3,870 | 4,440 | 3,760 | 3,720 | 3,290 | 3,520 | 3,180 | 3,260 |
| Pennsylvania | 11,460 | 11,500 | 11,400 | 12,400 | 10,560 | 7,740 | 7,125 | 9,300 | 7,200 | 7,700 |
| East North Central: | | | | | | | | | | |
| Ohio | 13,320 | 13,400 | 11,820 | 13,340 | 10,760 | 8,620 | 8,150 | 8,600 | 7,400 | 7,600 |
| Indiana | 10,480 | 10,330 | 9,760 | 10,260 | 9,210 | 7,060 | 6,830 | 7,000 | 6,100 | --- |
| Illinois | 12,920 | 11,920 | 11,740 | 12,760 | 10,920 | 9,220 | --- | --- | --- | --- |
| Michigan[3] | 16,160 | 16,240 | 15,980 | 16,660 | 14,460 | 9,540 | 10,200 | 9,500 | 11,400 | 8,900 |
| Wisconsin | 3,780 | 3,860 | 3,710 | 3,690 | 3,360 | 2,320 | 2,260 | 2,560 | 2,540 | 2,700 |
| West North Central: | | | | | | | | | | |
| Minnesota[4] | 3,603 | 3,447 | 3,147 | 3,111 | 2,674 | --- | --- | --- | --- | --- |
| Iowa | 4,210 | 4,150 | 3,870 | 3,970 | 3,330 | 2,830 | 2,830 | 3,040 | 3,460 | 4,300 |
| Missouri | 10,250 | 9,520 | [2,4]6,902 | [2,4]6,675 | [2,4]5,544 | --- | --- | --- | --- | --- |
| North Dakota[4] | 611 | 518 | 583 | 582 | 539 | 487 | 481 | 546 | 502 | 420 |
| South Dakota | 1,580 | 1,484 | 1,256 | 1,244 | 1,114 | 1,028 | 882 | 750 | 820 | 720 |
| Nebraska | 2,115 | 2,005 | 1,795 | 1,635 | 1,790 | 1,215 | 1,550 | 1,500 | 1,720 | 1,400 |
| Kansas | 3,680 | 3,920 | 3,595 | 3,650 | 3,435 | 3,025 | 3,025 | 3,040 | 2,880 | 2,580 |
| South Atlantic: | | | | | | | | | | |
| Delaware | 563 | 494 | 447 | 463 | 438 | 376 | 370 | 326 | 300 | 281 |
| Maryland | 6,820 | 6,910 | 6,060 | 7,240 | 6,300 | 5,980 | 4,980 | 5,920 | 5,260 | 4,780 |
| District of Columbia | 490 | 574 | 562 | 700 | 522 | 538 | 612 | 520 | 700 | --- |
| Virginia | 7,220 | 6,860 | 6,380 | 6,860 | 5,630 | 5,010 | 5,610 | 5,040 | 4,840 | 4,140 |
| West Virginia | 2,775 | 2,560 | 2,530 | 2,775 | 2,280 | --- | --- | --- | --- | --- |
| North Carolina | 11,080 | 10,980 | 10,660 | 11,600 | 9,030 | 7,620 | --- | --- | --- | --- |
| South Carolina[4] | 12,653 | 12,262 | 12,233 | 12,357 | 10,261 | 9,065 | 8,696 | 8,939 | 8,420 | 7,795 |
| Georgia | 9,640 | 9,280 | 9,080 | 9,160 | 8,480 | 10,360 | 9,180 | 8,900 | 7,600 | 7,900 |
| Florida | 7,270 | 7,450 | 6,760 | 6,840 | 6,070 | 4,620 | 4,490 | 4,340 | 4,060 | 4,240 |
| East South Central: | | | | | | | | | | |
| Kentucky | 8,980 | 7,390 | 5,700 | 6,140 | 5,430 | 4,810 | 4,580 | 4,460 | 4,160 | 3,500 |
| Tennessee | 8,260 | 7,740 | 8,210 | 8,580 | 7,660 | 6,550 | 6,070 | 5,520 | 5,340 | 5,300 |
| Alabama | 9,270 | 8,540 | 8,420 | 8,940 | 7,160 | 5,810 | 5,550 | 5,340 | 5,580 | 4,460 |
| Mississippi | 4,750 | 4,745 | 4,570 | 4,675 | 4,180 | 3,810 | 3,530 | 3,600 | 3,420 | 3,940 |
| West South Central: | | | | | | | | | | |
| Arkansas[4] | 4,451 | 4,198 | 4,176 | 4,361 | 4,034 | --- | --- | --- | --- | --- |
| Louisiana | 6,115 | 6,140 | 5,700 | 6,130 | 5,125 | 4,135 | 4,170 | 4,880 | 4,120 | 4,220 |
| Oklahoma[5] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Texas[4] | 25,414 | 18,012 | 21,698 | 21,586 | --- | --- | --- | --- | --- | --- |
| Mountain: | | | | | | | | | | |
| Montana | 842 | 724 | 744 | 680 | 586 | 534 | 522 | 520 | 640 | 610 |
| Idaho | 1,505 | 1,530 | 2,650 | 4,415 | 3,525 | 2,810 | 2,800 | 2,900 | 2,140 | 2,220 |
| Wyoming | 562 | 539 | 470 | 487 | 447 | 412 | 406 | 430 | 420 | 435 |
| Colorado[5] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| New Mexico[5] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Arizona[5] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Utah | 2,246 | 1,932 | 2,062 | 1,714 | 1,570 | 1,494 | 1,464 | 1,570 | 1,510 | 1,420 |
| Nevada[5] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pacific: | | | | | | | | | | |
| Washington[5] | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Oregon | 2,570 | 2,390 | 2,155 | 2,110 | 1,925 | 1,610 | 1,685 | 1,[illegible] | 1,620 | 1,720 |
| California | 22,640 | 21,520 | 21,220 | 21,280 | 18,700 | 15,620 | 15,600 | 14,600 | 14,300 | 16,700 |
| Alaska | 285 | 261 | 231 | 207 | 177 | 147 | 155 | 159 | 156 | 147 |
| Hawaii | 798 | 628 | 540 | 514 | 448 | 470 | 458 | 480 | 440 | 480 |

[1]Estimated.
[2]Incomplete.
[3]"Secret marriages" included in sample after 1964.
[4]Actual count as published in State report or available through State office.
[5]State does not have age on marriage form or does not have central file of marriage records.

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Table 2. Estimated illegitimacy ratios for teenage mothers, by age of mother and color: United States, 1960-68

[Ratios per 1,000 total live births in specified group. See appendix for estimating procedures]

| Color and year | Under 15 years | 15-19 years | 15 years | 16 years | 17 years | 18 years | 19 years |
|---|---|---|---|---|---|---|---|
| Total | | | | | | | |
| 1968 | 810.2 | 267.2 | 624.5 | 452.8 | 326.6 | 235.9 | 176.3 |
| 1967 | 803.0 | 242.1 | 597.0 | 425.7 | 302.9 | 213.6 | 156.3 |
| 1966 | 762.8 | 218.5 | 577.9 | 406.1 | 278.4 | 191.9 | 139.0 |
| 1965 | 785.3 | 208.3 | 563.6 | 374.1 | 257.5 | 175.5 | 132.9 |
| 1964 | 742.1 | 190.2 | 529.9 | 349.2 | 232.4 | 160.6 | 117.5 |
| 1963 | 711.1 | 173.6 | 501.8 | 315.4 | 216.4 | 152.7 | 106.3 |
| 1962 | 694.8 | 157.3 | 469.5 | 306.1 | 204.6 | 138.2 | 96.2 |
| 1961 | 696.9 | 154.9 | 465.9 | 291.8 | 194.4 | 136.1 | 96.7 |
| 1960 | 678.5 | 148.4 | 443.9 | 281.3 | 182.4 | 129.2 | 91.6 |
| White | | | | | | | |
| 1968 | 610.1 | 158.0 | 387.1 | 271.9 | 192.3 | 144.3 | 116.0 |
| 1967 | 615.7 | 138.5 | 355.4 | 236.8 | 176.7 | 129.0 | 100.6 |
| 1966 | 525.1 | 123.6 | 341.2 | 227.1 | 160.2 | 112.7 | 89.8 |
| 1965 | 572.8 | 114.3 | 321.6 | 201.1 | 141.0 | 104.4 | 80.5 |
| 1964 | 523.2 | 101.7 | 300.3 | 184.3 | 132.9 | 88.7 | 67.8 |
| 1963 | 487.4 | 89.9 | 294.9 | 171.9 | 112.8 | 81.4 | 59.8 |
| 1962 | 480.1 | 78.2 | 256.2 | 152.1 | 103.5 | 72.4 | 51.8 |
| 1961 | 498.6 | 76.5 | 260.1 | 145.6 | 96.1 | 71.3 | 51.5 |
| 1960 | 475.4 | 71.6 | 238.7 | 140.2 | 89.9 | 65.7 | 46.2 |
| All other | | | | | | | |
| 1968 | 907.7 | 549.7 | 836.3 | 722.3 | 611.7 | 492.2 | 398.6 |
| 1967 | 891.6 | 521.1 | 800.3 | 699.9 | 574.1 | 464.3 | 376.3 |
| 1966 | 878.8 | 500.9 | 790.0 | 681.9 | 548.1 | 443.8 | 361.3 |
| 1965 | 864.0 | 492.0 | 781.5 | 659.7 | 545.2 | 429.4 | 349.4 |
| 1964 | 856.0 | 468.3 | 759.1 | 651.8 | 517.2 | 404.5 | 331.5 |
| 1963 | 852.4 | 455.6 | 740.1 | 607.5 | 502.3 | 409.4 | 326.8 |
| 1962 | 842.0 | 439.3 | 724.3 | 607.8 | 490.9 | 390.6 | 316.9 |
| 1961 | 816.5 | 439.2 | 716.4 | 592.2 | 489.1 | 396.5 | 319.5 |
| 1960 | 822.4 | 421.5 | 700.7 | 577.8 | 469.3 | 376.2 | 306.2 |

Table 3. Estimated illegitimacy rates, by age of mother and color: United States, 1960-68

[Rates are illegitimate live births per 1,000 unmarried women in specified group. Figures for age of mother not stated are distributed]

| Color and year | 15-44 years[1] | 15-19 years | 20-24 years | 25-29 years | 30-34 years | 35-39 years[2] | 40-44 years[2] |
|---|---|---|---|---|---|---|---|
| Total | | | | | | | |
| 1968 | 24.4 | 19.8 | 37.3 | 38.6 | 28.2 | 14.9 | 3.8 |
| 1967 | 23.9 | 18.6 | 38.3 | 41.4 | 29.2 | 15.4 | 4.0 |
| 1966 | 23.4 | 17.5 | 39.1 | 45.6 | 33.0 | 16.4 | 4.1 |
| 1965 | 23.5 | 16.7 | 39.9 | 49.3 | 37.5 | 17.4 | 4.5 |
| 1964 | 23.0 | 15.8 | 39.9 | 50.2 | 37.2 | 16.3 | 4.4 |
| 1963 | 22.5 | 15.2 | 40.3 | 49.0 | 33.2 | 16.1 | 4.3 |
| 1962 | 21.9 | 14.8 | 40.9 | 46.7 | 29.7 | 15.6 | 4.0 |
| 1961 | 22.7 | 15.9 | 41.7 | 46.5 | 28.3 | 15.4 | 3.9 |
| 1960 | 21.6 | 15.3 | 39.7 | 45.1 | 27.8 | 14.1 | 3.6 |
| White | | | | | | | |
| 1968 | 13.2 | 9.8 | 23.1 | 22.1 | 15.1 | | 4.7 |
| 1967 | 12.5 | 9.0 | 23.1 | 22.7 | 14.0 | | 4.7 |
| 1966 | 12.0 | 8.5 | 22.5 | 23.5 | 15.7 | | 4.9 |
| 1965 | 11.6 | 7.9 | 22.1 | 24.3 | 16.6 | | 4.9 |
| 1964 | 11.0 | 7.3 | 21.2 | 24.1 | 15.9 | | 4.8 |
| 1963 | 10.5 | 7.0 | 20.8 | 22.0 | 14.2 | | 4.6 |
| 1962 | 9.8 | 6.5 | 20.0 | 19.8 | 12.6 | | 4.3 |
| 1961 | 10.0 | 7.0 | 19.7 | 19.4 | 11.3 | | 4.2 |
| 1960 | 9.2 | 6.6 | 18.2 | 18.2 | 10.8 | | 3.9 |
| All other | | | | | | | |
| 1968 | 86.6 | 82.8 | 118.3 | 104.4 | 80.6 | | 25.2 |
| 1967 | 89.5 | 80.2 | 128.2 | 118.4 | 97.2 | | 28.9 |
| 1966 | 92.8 | 76.9 | 139.4 | 143.8 | 119.4 | | 33.8 |
| 1965 | 97.6 | 75.8 | 152.6 | 164.7 | 137.8 | | 39.0 |
| 1964 | 97.2 | 74.0 | 164.2 | 168.7 | 132.3 | | 34.5 |
| 1963 | 97.1 | 73.8 | 161.8 | 171.5 | 124.3 | | 34.4 |
| 1962 | 97.5 | 74.1 | 163.6 | 172.7 | 115.2 | | 35.5 |
| 1961 | 100.8 | 77.6 | 169.6 | 172.7 | 112.0 | | 37.4 |
| 1960 | 98.3 | 76.5 | 166.5 | 171.8 | 104.0 | | 35.6 |

[1]Rates computed by relating total illegitimate births, regardless of age of mother, to unmarried women 15-44 years.

[2]Total illegitimacy rates computed by relating illegitimate births to women aged 40 and over to unmarried women aged 40-44 years; rates by color computed by relating illegitimate births to mothers aged 35 and over to unmarried women aged 35-44 years.

Table 4. Ten leading causes of death among teenagers 15-19 years of age, by color and sex: United States, 1969

| Rank order | Cause of death (Eighth Revision, International Classification of Diseases, Adapted, 1965), color, and sex | Number of deaths |
|---|---|---|
| ... | Total, both sexes—all causes | 21,141 |
| 1 | Accidents—E800-E949 | 12,505 |
| ... | Motor vehicle accidents—E810-E823 | 8,091 |
| ... | Accidental poisoning—E850-E877 | 524 |
| ... | Accidental falls—E880-E887 | 190 |
| ... | Accidental drowning and submersion—E910 | 1,241 |
| ... | Accident caused by firearm missile—E922 | 483 |
| 2 | Homicide—E960-E978 | 1,435 |
| 3 | Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues—140-209 | 1,336 |
| 4 | Suicide—E950-E959 | 1,045 |
| 5 | Diseases of heart—390-398,402,404,410-429 | 448 |
| 6 | Influenza and pneumonia—470-474,480-486 | 427 |
| 7 | Congenital anomalies—740-759 | 392 |
| 8 | Cerebrovascular diseases—430-438 | 245 |
| 9 | Nephritis and nephrosis—580-584 | 155 |
| 10 | Complications of pregnancy, childbirth, and the puerperium—630-678 | 103 |
| ... | All other causes—Residual | 3,050 |
| ... | White, male—all causes | 12,352 |
| 1 | Accidents—E800-E949 | 8,396 |
| ... | Motor vehicle accidents—E810-E823 | 5,858 |
| ... | Accidental poisoning—E850-E877 | 311 |
| ... | Accidental falls—E880-E887 | 150 |
| ... | Accidental drowning and submersion—E910 | 777 |
| ... | Accident caused by firearm missile—E922 | 334 |
| 2 | Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues—140-209 | 757 |
| 3 | Suicide—E950-E959 | 723 |
| 4 | Homicide—E960-E978 | 395 |
| 5 | Diseases of heart—390-398,402,404,410-429 | 205 |
| 6 | Congenital anomalies—740-759 | 191 |
| 7 | Influenza and pneumonia—470-474,480-486 | 183 |
| 8 | Cerebrovascular diseases—430-438 | 105 |
| 9 | Nephritis and nephrosis—580-584 | 61 |
| 10 | Meningococcal infections—036 | 42 |
| ... | All other causes—Residual | 1,294 |
| ... | White, female—all causes | 4,615 |
| 1 | Accidents—E800-E949 | 2,413 |
| ... | Motor vehicle accidents—E810-E823 | 1,988 |
| ... | Accidental poisoning—E850-E877 | 106 |
| ... | Accidental falls—E880-E887 | 22 |
| ... | Accidental drowning and submersion—E910 | 69 |
| ... | Accident caused by firearm missile—E922 | 30 |
| 2 | Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues—140-209 | 407 |
| 3 | Suicide—E950-E959 | 208 |
| 4 | Influenza and pneumonia—470-474,480-486 | 153 |
| 5 | Homicide—E960-E978 | 149 |
| 6 | Congenital anomalies—740-759 | 137 |
| 7 | Diseases of heart—390-398,402,404,410-429 | 105 |
| 8 | Cerebrovascular diseases—430-438 | 84 |
| 9 | Nephritis and nephrosis—580-584 | 46 |
| 10 | Complications of pregnancy, childbirth, and the puerperium—630-678 | 44 |
| ... | All other causes—Residual | 869 |

Table 4. Ten leading causes of death among teenagers 15-19 years of age, by color and sex: United States, 1969—Con.

| Rank order | Cause of death (Eighth Revision, International Classification of Diseases, Adapted, 1965), color, and sex | Number of deaths |
|---|---|---|
| ... | All other, male—all causes | 2,964 |
| 1 | Accidents—E800-E949 | 1,330 |
| ... | Motor vehicle accidents—E810-E823 | 611 |
| ... | Accidental poisoning—E850-E877 | 69 |
| ... | Accidental falls—E880-E887 | 17 |
| ... | Accidental drowning and submersion—E910 | 367 |
| ... | Accident caused by firearm missile—E922 | 100 |
| 2 | Homicide—E960-E978 | 750 |
| 3 | Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues—140-209 | 95 |
| 4 | Suicide—E950-E959 | 73 |
| 5 | Diseases of heart—390-398,402,404,410-429 | 68 |
| 6 | Influenza and pneumonia—470-474,480-486 | 51 |
| 7 | Congenital anomalies—740-759 | 34 |
| 8 | Cerebrovascular diseases—430-438 | 32 |
| 9 | Nephritis and nephrosis—580-584 | 25 |
| 10 | Meningococcal infections—036 | 20 |
| ... | All other causes—Residual | 486 |
| ... | All other, female—all causes | 1,210 |
| 1 | Accidents—E800-E949 | 366 |
| ... | Motor vehicle accidents—E810-E823 | 234 |
| ... | Accidental poisoning—E850-E877 | 38 |
| ... | Accidental falls—E880-E887 | 1 |
| ... | Accidental drowning and submersion—E910 | 28 |
| ... | Accident caused by firearm missile—E922 | 19 |
| 2 | Homicide—E960-E978 | 141 |
| 3 | Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues—140-209 | 77 |
| 4 | Diseases of heart—390-398,402,404,410-429 | 70 |
| 5 | Complications of pregnancy, childbirth, and the puerperium—630-678 | 59 |
| 6 | Suicide—E950-E959 | 41 |
| 7 | Influenza and pneumonia—470-474,480-486 | 40 |
| 8 | Congenital anomalies—740-759 | 30 |
| 9 | Cerebrovascular diseases—430-438 | 24 |
| 10 | Nephritis and nephrosis—580-584 | 23 |
| ... | All other causes—Residual | 339 |

Table 5. Death rates for selected causes of death among teenagers 15-19 years of age, by color and sex: United States, 1960-69

[Rates per 100,000 population in specified group]

| Cause of death and year | Total | | | White | | | All other | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| **All causes** | | | | | | | | | |
| 1969 | 114.7 | 164.8 | 63.7 | 106.7 | 153.7 | 58.7 | 164.7 | 235.8 | 94.7 |
| 1968 | 108.8 | 155.9 | 60.7 | 102.7 | 146.8 | 57.4 | 147.6 | 214.6 | 81.3 |
| 1967 | 102.7 | 146.4 | 58.3 | 97.9 | 140.2 | 54.9 | 133.4 | 187.8 | 79.8 |
| 1966 | 102.3 | 145.3 | 58.7 | 98.3 | 140.0 | 55.6 | 129.8 | 180.9 | 79.2 |
| 1965 | 95.1 | 135.6 | 53.8 | 91.0 | 130.8 | 50.1 | 123.7 | 168.9 | 78.8 |
| 1964 | 93.5 | 131.8 | 54.6 | 89.7 | 127.7 | 50.9 | 119.9 | 160.6 | 79.8 |
| 1963 | 90.2 | 125.4 | 54.4 | 86.6 | 121.7 | 50.8 | 119.7 | 159.0 | 81.0 |
| 1962 | 87.5 | 122.2 | 52.4 | 83.9 | 118.6 | 48.6 | 117.7 | 155.2 | 80.7 |
| 1961 | 87.6 | 123.1 | 51.7 | 83.4 | 118.8 | 47.7 | 117.2 | 154.9 | 80.3 |
| 1960 | 92.2 | 130.1 | 54.0 | 87.9 | 125.2 | 50.3 | 122.7 | 165.8 | 80.4 |
| **Motor vehicle accidents** | | | | | | | | | |
| 1969 | 47.1 | 69.6 | 24.3 | 49.3 | 72.9 | 25.3 | 33.3 | 48.6 | 18.3 |
| 1968 | 45.3 | 66.4 | 23.7 | 47.4 | 69.0 | 25.2 | 32.1 | 49.8 | 14.6 |
| 1967 | 44.6 | 66.7 | 22.2 | 46.7 | 69.7 | 23.4 | 30.7 | 46.9 | 14.6 |
| 1966 | 45.4 | 67.3 | 23.1 | 47.5 | 70.4 | 24.1 | 31.2 | 45.8 | 16.6 |
| 1965 | 40.2 | 61.0 | 19.1 | 41.9 | 63.5 | 19.8 | 28.7 | 43.2 | 14.3 |
| 1964 | 36.5 | 54.3 | 18.3 | 38.4 | 57.1 | 19.4 | 23.0 | 35.0 | 11.2 |
| 1963 | 34.8 | 52.0 | 17.3 | 36.8 | 54.8 | 18.4 | 23.9 | 37.5 | 10.5 |
| 1962 | 33.3 | 50.1 | 16.4 | 35.2 | 52.9 | 17.3 | 21.8 | 33.1 | 10.6 |
| 1961 | 32.0 | 48.8 | 15.2 | 33.4 | 50.8 | 15.7 | 22.4 | 33.7 | 11.3 |
| 1960 | 33.9 | 51.7 | 16.0 | 35.5 | 54.0 | 16.8 | 22.6 | 34.8 | 10.7 |
| **Other accidents** | | | | | | | | | |
| 1969 | 20.7 | 35.0 | 6.1 | 18.6 | 31.6 | 5.4 | 33.6 | 57.2 | 10.3 |
| 1968 | 19.7 | 34.0 | 5.2 | 18.0 | 30.9 | 4.8 | 30.5 | 53.8 | 7.5 |
| 1967 | 17.8 | 30.1 | 5.2 | 16.7 | 28.1 | 5.0 | 25.0 | 43.5 | 6.8 |
| 1966 | 18.0 | 30.8 | 4.9 | 16.7 | 28.5 | 4.6 | 26.6 | 46.8 | 6.7 |
| 1965 | 16.5 | 28.4 | 4.4 | 15.5 | 26.6 | 4.1 | 23.8 | 41.2 | 6.6 |
| 1964 | 16.8 | 29.1 | 4.4 | 15.4 | 26.7 | 3.9 | 26.5 | 46.0 | 7.4 |
| 1963 | 16.6 | 27.9 | 5.0 | 15.3 | 25.8 | 4.7 | 26.4 | 44.6 | 8.4 |
| 1962 | 15.4 | 26.7 | 4.1 | 14.3 | 24.7 | 3.8 | 25.2 | 44.1 | 6.7 |
| 1961 | 16.4 | 28.2 | 4.5 | 15.3 | 26.4 | 4.0 | 24.3 | 41.4 | 7.5 |
| 1960 | 16.8 | 29.2 | 4.3 | 15.5 | 27.0 | 4.0 | 25.8 | 45.8 | 6.3 |
| **Homicide** | | | | | | | | | |
| 1969 | 7.8 | 12.3 | 3.2 | 3.4 | 4.9 | 1.9 | 35.1 | 59.7 | 11.0 |
| 1968 | 6.9 | 11.0 | 2.7 | 3.3 | 5.0 | 1.6 | 29.5 | 49.6 | 9.5 |
| 1967 | 6.1 | 9.5 | 2.6 | 2.9 | 4.3 | 1.6 | 26.4 | 43.8 | 9.3 |
| 1966 | 5.1 | 7.8 | 2.4 | 2.5 | 3.4 | 1.6 | 22.9 | 38.0 | 7.9 |
| 1965 | 4.3 | 6.5 | 2.1 | 2.2 | 3.0 | 1.3 | 18.9 | 30.8 | 7.1 |
| 1964 | 4.3 | 6.3 | 2.2 | 2.2 | 2.9 | 1.4 | 19.1 | 30.8 | 7.7 |
| 1963 | 3.6 | 5.5 | 1.7 | 2.0 | 2.9 | 1.0 | 15.5 | 25.0 | 6.2 |
| 1962 | 3.7 | 5.4 | 1.9 | 1.9 | 2.6 | 1.3 | 16.6 | 27.0 | 6.3 |
| 1961 | 3.6 | 5.5 | 1.7 | 1.9 | 2.7 | 1.1 | 15.5 | 25.4 | 5.9 |
| 1960 | 4.0 | 6.1 | 1.9 | 2.2 | 3.2 | 1.2 | 17.2 | 27.6 | 7.0 |
| **Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues** | | | | | | | | | |
| 1969 | 7.2 | 9.2 | 5.3 | 7.3 | 9.4 | 5.2 | 6.8 | 7.6 | 6.0 |
| 1968 | 7.5 | 9.2 | 5.7 | 7.5 | 9.3 | 5.7 | 7.1 | 8.5 | 5.7 |
| 1967 | 7.6 | 9.4 | 5.7 | 7.8 | 9.6 | 6.0 | 6.2 | 8.4 | 4.0 |
| 1966 | 7.7 | 9.2 | 6.2 | 7.8 | 9.5 | 6.2 | 6.7 | 7.1 | 6.3 |
| 1965 | 7.6 | 9.3 | 5.8 | 7.5 | 9.3 | 5.7 | 7.9 | 9.2 | 6.6 |
| 1964 | 7.7 | 9.0 | 6.3 | 7.9 | 9.3 | 6.4 | 6.3 | 7.1 | 5.6 |
| 1963 | 7.6 | 8.8 | 6.3 | 7.6 | 8.9 | 6.3 | 7.2 | 7.9 | 6.4 |
| 1962 | 7.7 | 9.1 | 6.3 | 7.7 | 9.1 | 6.3 | 7.2 | 8.5 | 6.0 |
| 1961 | 7.7 | 9.1 | 6.3 | 7.9 | 9.3 | 6.4 | 6.5 | 7.9 | 5.2 |
| 1960 | 7.7 | 9.6 | 5.8 | 7.9 | 9.7 | 6.0 | 6.8 | 9.4 | 4.3 |

Table 5. Death rates for selected causes of death among teenagers 15-19 years of age, by color and sex: United States, 1960-69—Con.

[Rates per 100,000 population in specified group]

| Cause of death and year | Total | | | White | | | All other | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| **Suicide** | | | | | | | | | |
| 1969 | 5.7 | 8.6 | 2.7 | 5.9 | 9.0 | 2.6 | 4.5 | 5.8 | 3.2 |
| 1968 | 5.1 | 7.8 | 2.2 | 5.3 | 8.3 | 2.2 | 3.5 | 4.7 | 2.2 |
| 1967 | 4.7 | 7.0 | 2.4 | 4.9 | 7.5 | 2.2 | 3.7 | 3.8 | 3.5 |
| 1966 | 4.3 | 6.5 | 2.1 | 4.4 | 6.7 | 2.1 | 3.6 | 4.8 | 2.4 |
| 1965 | 4.0 | 6.1 | 1.9 | 4.1 | 6.3 | 1.8 | 3.8 | 5.2 | 2.4 |
| 1964 | 4.0 | 6.3 | 1.7 | 4.2 | 6.6 | 1.7 | 2.9 | 4.0 | 1.8 |
| 1963 | 4.0 | 6.0 | 1.9 | 4.2 | 6.3 | 1.9 | 2.9 | 3.7 | 2.0 |
| 1962 | 3.7 | 5.5 | 2.0 | 3.9 | 5.8 | 2.0 | 2.8 | 3.7 | 1.9 |
| 1961 | 3.4 | 5.3 | 1.5 | 3.5 | 5.5 | 1.6 | 2.4 | 3.6 | 1.3 |
| 1960 | 3.6 | 5.6 | 1.6 | 3.8 | 5.9 | 1.6 | 2.4 | 3.4 | 1.5 |
| **Major cardiovascular-renal diseases** | | | | | | | | | |
| 1969 | 4.1 | 4.8 | 3.3 | 3.4 | 4.2 | 2.6 | 8.2 | 8.6 | 7.8 |
| 1968 | 3.8 | 4.3 | 3.4 | 3.3 | 3.7 | 2.9 | 7.1 | 7.5 | 6.6 |
| 1967 | 4.8 | 5.0 | 4.6 | 4.0 | 4.4 | 3.6 | 9.7 | 8.8 | 10.6 |
| 1966 | 5.1 | 5.6 | 4.6 | 4.4 | 4.8 | 3.9 | 9.9 | 10.6 | 9.3 |
| 1965 | 5.3 | 5.7 | 4.9 | 4.6 | 5.0 | 4.3 | 9.6 | 10.5 | 8.8 |
| 1964 | 5.7 | 6.1 | 5.2 | 5.0 | 5.9 | 4.1 | 10.4 | 7.8 | 12.9 |
| 1963 | 5.6 | 5.6 | 5.6 | 4.7 | 5.0 | 4.5 | 12.1 | 10.6 | 13.5 |
| 1962 | 5.3 | 5.7 | 5.0 | 4.5 | 5.1 | 4.0 | 10.8 | 9.2 | 12.4 |
| 1961 | 6.4 | 7.1 | 5.7 | 5.6 | 6.5 | 4.7 | 11.9 | 11.6 | 12.2 |
| 1960 | 6.2 | 6.9 | 5.6 | 5.4 | 6.1 | 4.7 | 12.2 | 12.8 | 11.7 |
| **Complications of pregnancy, childbirth, and the puerperium** | | | | | | | | | |
| 1969 | 0.6 | ... | 1.1 | 0.3 | ... | 0.6 | 2.3 | ... | 4.6 |
| 1968 | 0.5 | ... | 1.0 | 0.3 | ... | 0.6 | 2.0 | ... | 3.9 |
| 1967 | 0.7 | ... | 1.5 | 0.4 | ... | 0.9 | 2.7 | ... | 5.4 |
| 1966 | 0.5 | ... | 1.1 | 0.3 | ... | 0.5 | 2.2 | ... | 4.4 |
| 1965 | 0.7 | ... | 1.4 | 0.4 | ... | 0.7 | 3.0 | ... | 5.9 |
| 1964 | 0.7 | ... | 1.4 | 0.4 | ... | 0.8 | 2.9 | ... | 5.8 |
| 1963 | 0.8 | ... | 1.7 | 0.5 | ... | 1.0 | 3.3 | ... | 6.6 |
| 1962 | 0.8 | ... | 1.5 | 0.4 | ... | 0.8 | 3.6 | ... | 7.1 |
| 1961 | 0.8 | ... | 1.6 | 0.5 | ... | 1.0 | 3.3 | ... | 6.5 |
| 1960 | 1.0 | ... | 1.9 | 0.6 | ... | 1.1 | 3.8 | ... | 7.6 |
| **Influenza and pneumonia** | | | | | | | | | |
| 1969 | 2.3 | 2.5 | 2.1 | 2.1 | 2.3 | 1.9 | 3.6 | 4.1 | 3.1 |
| 1968 | 2.6 | 3.1 | 2.1 | 2.3 | 2.7 | 1.9 | 4.3 | 5.6 | 3.0 |
| 1967 | 2.1 | 2.5 | 1.7 | 1.9 | 2.3 | 1.5 | 3.6 | 4.4 | 2.8 |
| 1966 | 2.3 | 2.6 | 1.9 | 2.1 | 2.5 | 1.7 | 3.3 | 3.5 | 3.1 |
| 1965 | 2.1 | 2.3 | 1.8 | 1.9 | 2.1 | 1.6 | 3.4 | 3.7 | 3.1 |
| 1964 | 2.1 | 2.2 | 1.9 | 1.9 | 2.1 | 1.6 | 3.6 | 3.1 | 4.0 |
| 1963 | 2.4 | 2.7 | 2.1 | 2.2 | 2.4 | 2.0 | 3.7 | 4.3 | 3.0 |
| 1962 | 2.4 | 2.8 | 2.0 | 2.2 | 2.6 | 1.8 | 3.7 | 3.7 | 3.7 |
| 1961 | 2.0 | 2.4 | 1.7 | 1.8 | 2.3 | 1.3 | 4.0 | 3.7 | 4.2 |
| 1960 | 2.8 | 3.0 | 2.6 | 2.5 | 2.7 | 2.2 | 5.4 | 5.3 | 5.5 |
| **Congenital anomalies** | | | | | | | | | |
| 1969 | 2.1 | 2.4 | 1.8 | 2.1 | 2.4 | 1.7 | 2.5 | 2.7 | 2.3 |
| 1968 | 2.2 | 2.5 | 1.9 | 2.2 | 2.5 | 1.9 | 2.0 | 2.5 | 1.6 |
| 1967 | 2.3 | 2.9 | 1.8 | 2.3 | 2.8 | 1.7 | 2.6 | 3.2 | 2.0 |
| 1966 | 2.3 | 2.5 | 2.2 | 2.3 | 2.4 | 2.1 | 2.6 | 2.8 | 2.4 |
| 1965 | 2.5 | 2.9 | 2.1 | 2.5 | 2.9 | 2.1 | 2.8 | 3.2 | 2.4 |
| 1964 | 2.6 | 3.0 | 2.3 | 2.7 | 3.1 | 2.2 | 2.5 | 2.5 | 2.6 |
| 1963 | 2.7 | 3.1 | 2.3 | 2.6 | 3.0 | 2.1 | 3.1 | 2.7 | 3.4 |
| 1962 | 2.8 | 3.3 | 2.3 | 2.8 | 3.4 | 2.2 | 3.1 | 3.1 | 3.1 |
| 1961 | 3.2 | 3.5 | 2.9 | 3.2 | 3.5 | 2.8 | 3.2 | 3.1 | 3.3 |
| 1960 | 2.8 | 3.3 | 2.4 | 2.9 | 3.4 | 2.5 | 1.9 | 2.5 | 1.4 |

# APPENDIX

The data presented in this report were derived primarily from the official vital statistics of the United States. These statistics are published annually by the National Center for Health Statistics in *Vital Statistics of the United States.* Also included in this report are population data and various other estimates obtained, as indicated in the text, from publications of the U.S. Bureau of the Census.

A complete discussion of the technical aspects of the marriage, divorce, natality, and mortality data appears in the annual vital statistics volumes. Similar technical discussions and explanations accompany the population enumerations and estimates published by the U.S. Bureau of the Census. Selected notes pertaining to the statistics excerpted for inclusion in this report are presented here.

## Sources of Data

Vital statistics for the United States (the 50 States and the District of Columbia) are limited to events occurring within the United States during the calendar year, including those occurring to nonresidents of the United States. Events occurring to members of the Armed Forces or other U.S. nationals outside the United States are excluded.

Figures not designated as based on sample data were obtained from a complete microfilm file of records submitted by States and local areas. Birth data were obtained from a 50-percent sample of birth records for all years shown except 1967, when a 20- to 50-percent sample was used. Mortality data were obtained from the complete microfilm file. Figures for marriages and divorces are based on data tabulated from probability samples of records selected in the National Center for Health Statistics from copies of marriage and divorce certificates sent in by States participating in the marriage-registration area (MRA) and the divorce-registration area (DRA). During the 1960's both these areas expanded—the MRA from 33 States in 1960 to 39 States and the District of Columbia in 1968-70 (figure I) and the DRA from 18 States in 1960 to 28 States in 1969 and 1970 (figure II).

The sampling rates for marriage and divorce records varied by State from a 5-percent sample to inclusion of all records, depending on the number of events occurring in the State. A sampling rate that would yield at least 2,500 records for marriages and 1,000 records for divorces was designated for each State.

Nationwide marriage figures were obtained for 1960. Marriages in the MRA represented about 62 percent of the national total in 1961, but with added MRA States they represented between 70 and 80 percent of the national total during the 1964-69 period. Divorces in the DRA accounted for only 24 percent of all divorces in 1960, but by 1968 and 1969 they accounted for 54 and 59 percent, respectively. Numbers and percents of marriages for which age of bride is known and numbers and percents of divorces for which age of wife is known appear in table I. They are an indicator of the volume of

Table I. Total number of marriages and number and percent of marriages where age of bride was reported and total number of divorces and number and percent of divorces where age of wife was reported: United States, 1960-69

| Year | Marriages | | | Divorces | | |
|---|---|---|---|---|---|---|
| | All marriages | Age reported[1] | | All divorces | Age reported[2] | |
| | | Number | Percent | | Number | Percent |
| 1969 | 2,145,000 | 1,919,361 | 89.5 | 639,000 | 287,741 | 45.0 |
| 1968 | 2,069,000 | 1,849,902 | 89.4 | 584,000 | 233,798 | 40.0 |
| 1967 | 1,927,000 | 1,718,700 | 89.2 | 523,000 | 120,759 | 23.1 |
| 1966 | 1,857,000 | 1,657,313 | 89.2 | 499,000 | 110,374 | 22.1 |
| 1965 | 1,800,000 | 1,497,946 | 83.2 | 479,000 | 102,645 | 21.4 |
| 1964 | 1,725,000 | 1,222,397 | 70.9 | 450,000 | 94,157 | 20.9 |
| 1963 | 1,654,000 | 1,033,950 | 62.5 | 428,000 | 82,302 | 19.2 |
| 1962 | 1,577,000 | 978,769 | 62.1 | 413,000 | 82,971 | 20.1 |
| 1961 | 1,548,000 | 962,124 | 62.2 | 414,000 | 79,548 | 19.2 |
| 1960 | 1,523,000 | 1,497,077 | 98.3 | 393,000 | 55,690 | 14.2 |

[1] For 1960, nationwide data excluding cases with age of bride not stated; for 1961-64, marriage-registration area data; for 1965-69, MRA data combined with data for non-MRA States reporting age.
[2] Divorce-registration area data excluding cases with age of wife not stated.

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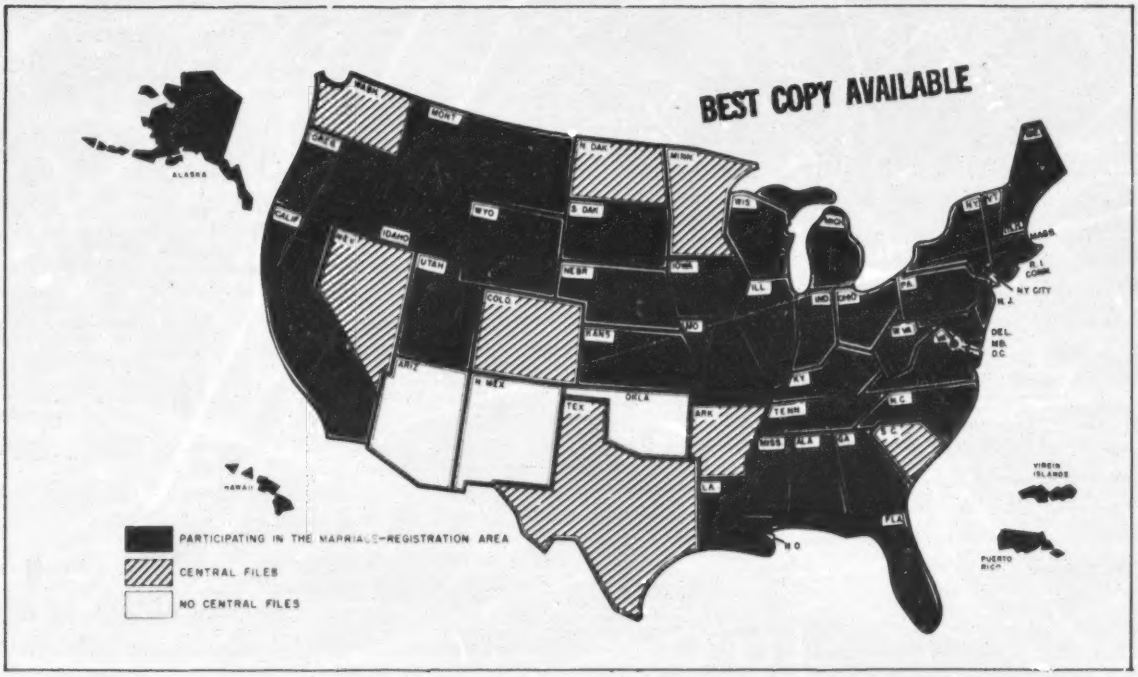


Figure I. Marriage-registration area status, 1968-70.

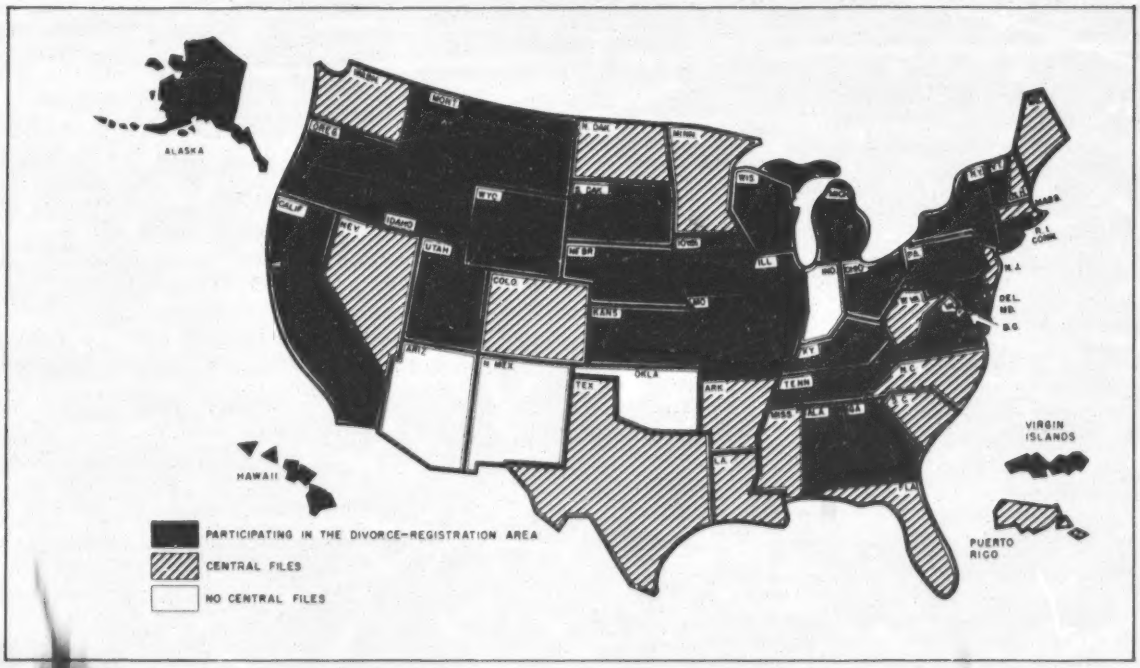


Figure II. Divorce-registration area status, 1969-70.

cases from which information about teenage marriage and divorce were obtained.

### Rate Computations

Rates for census years are based on populations enumerated as of April 1 of that year. All other rates are based on estimates of the population present in the area as of July 1, including Armed Forces stationed in the area but excluding Armed Forces abroad. The population estimates were prepared by the U.S. Bureau of the Census.

### Estimating Procedures

*National estimates of marriages.*—The number of marriages in the United States during 1969 by age and sex were estimated from sample data for the MRA (39 States and the District of Columbia) combined with data from five other States reporting marriages by age (Arkansas, Minnesota, South Carolina, North Dakota, and Texas). It was assumed that brides and grooms marrying in the 6 States where age was not reported (Arizona, Colorado, New Mexico, Nevada, Oklahoma, and Washington) had the same distribution by age as brides and grooms marrying where age at marriage was known. National totals of marriages by age were obtained by applying the percent distribution by age in the reporting area to the U.S. total of marriages. National marriage rates were computed by relating the estimated totals to the unmarried resident population of the U.S. by age and sex.

Similar estimates were made for 1966-68 using data from the same reporting States. (Missouri was not in the MRA until 1968 but was included as a non-MRA State reporting marriages by age for the 1965-67 estimates.) The 1965 estimates were based on data excluding Texas. For 1960, U.S. data by age were obtained from a nationwide sample, but State figures were compiled only for States in the MRA.

*Regional estimates of marriages.*—Regional estimates of teenage marriages (table 1) were made by computing separate estimates for each nonreporting State and summarizing State totals for each of the four regions. Teenage marriage totals were available for all States in the Northeast and North Central Regions beginning with 1965 data. For the South Region estimates were prepared for Texas in 1965 and for Oklahoma in 1965-69. Estimates for the West were prepared for five States (Arizona, Colorado, Nevada, New Mexico, and Washington) for all years 1965-69.

*Estimates of teenage brides and grooms at specified ages.*—The uniform group of States for which data are shown in table D are those comprising the MRA in 1961, excluding New York. Because data for New York State excluded New York City until 1965, they are eliminated for all years for the purpose of comparability.

For 1961 and 1962 the number of marriages at ages under 18 and 18-19 are available for the MRA as a whole, but data were not tabulated in such detail for each State. Estimates were made for New York State by assuming the same age distribution of brides and grooms under age 20 in the State as for those in the entire MRA including New York State. The resulting State estimates were subtracted from the MRA totals in each of the two age groups to obtain estimates for the 34 States and the District of Columbia for 1961 and 1962.

*National estimates of divorces.*—National estimates of divorces by age and sex for 1969 (table Q) were prepared by a procedure similar to that used for national estimates of marriages. Sample data on age at decree and age at marriage, reported by the 28 States in the DRA, were used as the basis for estimates. It was assumed that the age distribution of husbands and wives granted decrees in the reporting States was representative of that in nonreporting States. Nationwide totals were derived by applying the known distribution to the final U.S. total of divorces in 1969. (For 1969 age was known for approximately 75 percent of the divorces in the DRA, or about 45 percent of the 639,000 divorces in the entire United States.)

National divorce rates by age at decree were computed by relating the estimated numbers of divorces for the United States to the married population of the United States by age and sex.

### Illegitimate Births

Legitimacy status was reported in 40 States and the District of Columbia in 1968. The following States did not require reporting of this information: California, Connecticut, Georgia, Idaho, Maryland, Massachusetts, Montana, New Mexico, New York, and Vermont. In earlier years fewer States reported. In 1960, the earliest year for which illegitimate live births and ratios are shown in this report, legitimacy status was reported in 34 States and the District of Columbia. In addition to those listed above, the following States did not report legitimacy status in 1960: Arizona, Arkansas, Colorado, Nebraska, New Hampshire, and Oklahoma.

In making annual estimates of the number of illegitimate births occurring in the country as a whole, the States were grouped into nine geographic divisions. The combined ratio of illegitimate births per 1,000 total live births for all reporting States in a single geographic division was then applied to all live births occurring to residents of that division. This estimating procedure was done separately for the two color groups, white and all other. For each year, the sum of these estimates for the nine geographic divisions makes up the estimate for the United States.

In processing the data, no adjustments were made for misstatements of legitimacy status on the birth record or for failure to register illegitimate births because the extent of such reporting problems is unknown. A birth with legitimacy status not stated was considered to be legitimate.

Table II. Standard errors of estimated numbers of events expressed as percentage of area total: marriage-registration area and divorce-registration area, 1969

| Registration area | All events | Standard error of estimated number expressed as percentage of area total | | | | |
|---|---|---|---|---|---|---|
| | | 1 or 99 | 2 or 98 | 3 or 97 | 4 or 96 | 5 or 95 |
| Marriage-registration area | | | | | | |
| Number of marriages | 1,660,547 | 16,605 or 1,643,942 | 33,211 or 1,627,336 | 49,816 or 1,610,731 | 66,422 or 1,594,125 | 83,027 or 1,577,520 |
| Standard error | ... | 457 | 643 | 783 | 900 | 1,001 |
| Divorce-registration area | | | | | | |
| Number of divorces | 378,095 | 3,781 or 374,314 | 7,562 or 370,533 | 11,343 or 366,752 | 15,124 or 362,971 | 18,905 or 359,190 |
| Standard error | ... | 159 | 223 | 272 | 312 | 347 |

| Registration area | Standard error of estimated number expressed as percentage of area total—Con. | | | | | |
|---|---|---|---|---|---|---|
| | 7 or 93 | 10 or 90 | 15 or 85 | 20 or 80 | 25 or 75 | 50 |
| Marriage-registration area | | | | | | |
| Number of marriages | 116,238 or 1,544,309 | 166,055 or 1,494,492 | 249,082 or 1,411,465 | 332,109 or 1,328,438 | 415,137 or 1,245,410 | 830,274 |
| Standard error | 1,172 | 1,378 | 1,640 | 1,837 | 1,989 | 2,296 |
| Divorce-registration area | | | | | | |
| Number of divorces | 26,467 or 351,628 | 37,810 or 340,286 | 56,714 or 321,381 | 75,619 or 302,476 | 94,524 or 283,571 | 189,048 |
| Standard error | 407 | 478 | 569 | 638 | 690 | 797 |

### Standard Errors

All statistics estimated from sample surveys are subject to sampling and measurement errors. The standard error, a measure of sampling variability, is the amount which, when added to or subtracted from an estimate, gives an interval that would contain the actual value being estimated in approximately 68 out of 100 similarly selected samples.

The standard errors of some statistics used in this report are shown in tables II through V.

Three types of rates appear in this report, each of which involves a different method for computing the standard error.

1. The standard error of an estimated proportion of a known total number of events can be computed by dividing the standard error for the estimated frequency by the total number of events for the area.

   For example, an estimated 32.6 percent (or 540,841) of all brides in the MRA in 1969 were teenagers (table N). The standard error of a frequency equal to 32.6 percent of the MRA total of 1,660,547, interpolated from table II, is 2,082, which yields .001 or 0.1 percent when divided by the total number of MRA marriages. By adding and subtracting 0.1 from 32.6, we obtain the interval 32.7 to 32.5. The chances are about 68 out of 100 that the actual proportion of teenage brides falls within this interval.

2. Proportions with an estimated base and with counts in the numerator also included in the denominator have standard error:

$$S_{x/y} = \frac{\sqrt{y^2 S_x^2 - x^2 S_y^2}}{y^2}$$

Where $S = x/y$ is the standard error of the proportion of interest; $x$ and $y$ are estimated frequencies of specified subgroups of a known total and $x$ is a subgroup of $y$; and $S_x$ is the standard error of $x$ and $S_y$ is the standard error of $y$.

For example, in the MRA an estimated 13.3 percent of all first-married brides aged 15-17 in 1969 were in the color group all other (table H). The standard error of this estimate, where $x = 15{,}371$, $y = 115{,}278$, $S_x = 411$, and $S_y = 1{,}172$ (derived from table II), is .004 or, converted to a percent, .4. Thus the true value of the estimate lies between 13.7 and 12.9.

3. The standard error of a rate when the numerator is not a minor subset of the denominator can be approximated using the following formula:

$$S_{(x/y)} = \sqrt{\frac{S_x^2}{y^2} + \frac{x^2 S_y^2}{y^4}}$$

Where $x$ = the estimated frequency of a particular characteristic of the population,
$y$ = the estimated size of the population at risk,
$S_x$ = standard error of $x$, and
$S_y$ = standard error of $y$.

It should be noted that the formula shown above gives the standard error of a proportion. In order to obtain a standard error of a rate per 1,000, $S_{x/y}$ should be multiplied by 1,000. Since the magnitude of a standard error of an estimated rate depends on both the frequency and population on which the rate is computed, two or more identical rates may have different standard errors.

The standard errors of many such rates are given in tables III, IV, and V.

Table III. Standard errors of estimated numbers of marriages and of marriage rates, by sex and age: United States, 1969

[Estimates in table C]

| Age | Standard error | | | |
|---|---|---|---|---|
| | Number | | Rate | |
| | Female | Male | Female | Male |
| All ages-- | ... | ... | ... | ... |
| 15-19 years----- | 2,325 | 1,767 | 1.14 | 0.46 |
| 20-24 years----- | 2,428 | 2,511 | 6.08 | 3.91 |
| 25-34 years----- | 1,814 | 2,163 | 5.89 | 6.44 |
| 35-44 years----- | 1,214 | 1,355 | 2.82 | 4.24 |
| 45-54 years----- | 992 | 1,072 | 1.14 | 2.52 |
| 55-64 years----- | 718 | 812 | 0.40 | 1.89 |
| 65 years and over---------- | 459 | 677 | 0.07 | 0.52 |

Table IV. Standard errors of teenage marriage rates by specified age of bride and groom and whether or not difference in rate was significant: marriage-registration area, 1969 and 1965

[Rates in tables E and F]

| Age | Bride | | | Groom | | |
|---|---|---|---|---|---|---|
| | Standard error | | Whether or not difference in rates was significant | Standard error | | Whether or not difference in rates was significant |
| | 1969 | 1965 | | 1969 | 1965 | |
| Under 15 years---------- | 0.06 | 0.07 | No | ... | ... | ... |
| All ages 15-19 years---------- | 0.53 | 0.62 | Yes | 0.26 | 0.27 | Yes |
| 15-17 years---------- | 0.43 | 0.48 | No | 0.12 | 0.11 | Yes |
| 15 years---------- | 0.27 | 0.26 | Yes | ... | ... | ... |
| 16 years---------- | 1.01 | 0.97 | No | 0.07 | 0.07 | Yes |
| 17 years---------- | 1.54 | 1.55 | No | 0.41 | 0.37 | Yes |
| 18-19 years---------- | 2.74 | 2.98 | No | 1.17 | 1.26 | Yes |
| 18 years---------- | 3.56 | 3.68 | No | 1.40 | 1.21 | Yes |
| 19 years---------- | 5.15 | 6.84 | No | 2.47 | 2.78 | No |

Table V. Standard errors of estimated numbers of divorces and of divorce rates, by sex and age at decree: United States, 1969

[Estimates in table N]

| Age | Standard error | | | |
|---|---|---|---|---|
| | Number | | Rate | |
| | Wife | Husband | Wife | Husband |
| All ages-- | ... | ... | ... | ... |
| 15-19 years----- | 480 | 188 | 1.25 | 1.51 |
| 20-24 years----- | 1,039 | 872 | 0.53 | 0.76 |
| 25-29 years----- | 990 | 999 | 0.40 | 0.49 |
| 30-34 years----- | 830 | 706 | 0.22 | 0.40 |
| 35-44 years----- | 975 | 1,041 | 0.14 | 0.21 |
| 45-54 years----- | 732 | 833 | 0.11 | 0.14 |
| 55-64 years----- | 411 | 514 | 0.08 | 0.09 |
| 65 years and over---------- | 188 | 301 | 0.05 | 0.06 |

Standard errors for the number of marriages or divorces in a subgroup were computed by multiplying the standard error for the MRA or DRA frequency for the subgroup by a constant factor ratio, computed as 1.1167 for marriages and 1.6901 for divorces. This factor ratio is 1 plus the total number of events in the United States for which age was not reported to the total number of events for which age was reported. The standard error of the national estimated number of events based on probability samples for a reporting area can be approximated using the following formula:

$$S'_x = \left(1 + \frac{N_2}{N_1}\right) S_x$$

where $S'_x$ is the standard error of the U.S. estimate, $\left(1 + \frac{N_2}{N_1}\right)$ is the constant factor, and $S_x$ is the standard error of the estimated frequency in the reporting area. Thus in computing $S'_x$ of the 1969 U.S. total of teenage brides aged 15-19 (717,000) we simply multiply 2,082 ($S_x$ for teenage brides in the MRA) times 1.1167 and arrive at $S'_x = 2{,}325$. This figure, when added to and subtracted from 717,000, places the true value of the estimate between 719,300 and 714,700.

Standard errors for estimated U.S. rates of marriages or divorces by sex and age can be obtained from the formula given in item 2 above. As an illustration, suppose the standard error is to be calculated for the estimated 1969 U.S. marriage rate for teenage women aged 15-19 (87.7). In this formula $x$ is the total number of teenage brides, and $S_x$ is the standard error of $x$, seen to be 2,325. $Y$ is the U.S. total resident unmarried female population aged 15-19 as of July 1, 1969 (8,171,000) furnished by the U.S. Bureau of the Census, and $S_y$ is the standard error of $y$. Substituting these values into the appropriate formula and multiplying by 1,000, the result is $S_{x/y} = 1.14$, and the interval of the true rate is 86.6 to 88.8.

It is possible to test whether two proportions (or two rates converted to proportions) are significantly different by use of the following expression:

$$\frac{P_1 - P_2}{\sqrt{S_{p1}^2 + S_{p2}^2}}$$

If the quotient is greater than 2, the difference is considered statistically significant in this report. Teenage marriage rates at specified ages for the MRA in 1969 and 1965 were tested, as shown in table IV. "Yes" and "No" responses indicate whether changes in such rates during this period were statistically significant.

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